



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

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AUTO SAFETY HOTLINE  
(800) 424-9393  
Wash. D.C. Area 366-0123

**DYNAMIC SCIENCE, INC.**  
**In-Depth Accident Investigation**

**Contract DTNH22-94-D-27058**  
**Case DSI-95-AB-022**

 1996



## **DISCLAIMERS**

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points are coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

## TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.  
CONTRACT NUMBER: DTNH22-94-D-27058  
CASE NUMBER: Case DSI-95-AB-022

  
This low-speed collision occurred at the intersection of a straight roadway and an interstate on/off ramp during the morning hours of a fall weekday. The weather was clear and dry and there were no visual obstructions.

Vehicle 1, a 1995 Ford Escort driven by a 21-year-old female, was traveling west on a 5-lane divided roadway approaching the intersection. Vehicle 1 was equipped with both driver's and passenger's side supplemental restraint systems (airbags). The passenger side airbag is a mid-mount setup. The driver was wearing the available automatic shoulder belt with manual lap belt. The right front seat was occupied by a 6-month-old male seated in a Century 565 child safety seat. The child seat was in the rearward facing position. This would put the forward facing edge of the seat approximately 23 cm (9 in.) from the face of the instrument panel. The bucket seat was, according to the driver, in the most rearward position. The child seat was secured through the base with both the lap and shoulder belt. No locking clip was used.

Vehicle 2, a 1991 Lexus ES20 driven by a 51-year-old male, was traveling eastbound approaching the same intersection.

As Vehicle 2 entered the intersection, the driver decided to make a left-hand turn onto the on-ramp. At this location, however, the on-ramp access is limited to high-occupancy vehicles. The driver continued turning to make a U-turn going west. The traffic signal had changed by this time and Vehicle 1 entered the intersection. The driver of Vehicle 1 saw Vehicle 2. The driver braked, leaving 5.4 M (18 ft.) of pre-impact skid marks. Vehicle 1 struck the left rear bumper corner of Vehicle 2. Both airbags deployed at this point. The passenger side airbag struck the rear of the child safety seat. The left side of the carrying handle, which was in the down position, broke and was forced upward into the carrying position. There is no indication that the handle came into contact with this occupant. The child seat was forced rearward and upward by the deployment. There is no evidence that the module cover was involved.

The right front occupant sustained a 4 mm linear fracture to the left parietal bone, as well as a possible small underlying subdural hematoma contusion, due to contact with the child safety seat back. He was transported by ambulance to an emergency room. He was treated at this location and later transferred to a second hospital. He was admitted overnight for observation and released the next day. At this time, it appears that the child has fully recovered.

Vehicle 1 was towed from the scene due to damage. Vehicle 2 was driven from the scene.

This case was initiated by the Special Crash Investigations branch after notification by the NTSB. Both vehicles were repaired by the time DSI began its investigation.

**ACCIDENT DATA:**

**Location:** [REDACTED]  
**Area/Type:** Urban  
**Date/Time:** Fall weekday/morning  
**Accident Type:** Vehicle to vehicle / Front to left rear

**Injury Severity:**

**Vehicle 1:** Driver, AIS=1  
RF passenger, AIS=2

**Vehicle 2:** Not injured

**AMBIENCE:**

**Viewing Conditions:** Slight Hill crest  
**Cloud Cover:** Clear  
**Precipitation:** None  
**Temperature** Unknown  
**Road Surface:** Concrete

**ROADWAY:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Type:</b>	5-lane, divided	6-lane, divided
<b>Width:</b>	29.8 M (98 ft.)	29.8 (98 ft.)
<b>Traffic Density:</b>	Moderate to heavy	Moderate to heavy
<b>Median:</b>	Flush, painted	Flush, painted
<b>Edge:</b>	2.4 M (8 ft.) Bike lane/Curb	2.4 M (8 ft.) Bike lane/Curb
<b>Surface:</b>	Concrete	Concrete
<b>Reported Defects:</b>	None	None
<b>Co-efficient of Friction (est.):</b>	0.70	0.70
<b>Vertical Alignment:</b>	Level	Level
<b>Horizontal Alignment:</b>	Straight	Straight

**Traffic Controls:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Signals:</b>	Tri-color traffic signal	Tri-color traffic signal
<b>Signs:</b>	None	None
<b>Speed Limit:</b>	64 KPH (40 MPH)	64 KPH (40 MPH)
<b>Markings:</b>	Single, dashed white lines separate WB travel lanes. Double, solid, yellow painted lines form northern edge of flush median.	Solid, white, painted line separate turn lane from EB travel lanes. Double, solid, yellow, painted lines form southern edge of flush median.

**VEHICLES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Description:</b>	1995 Ford Escort	1991 Lexus ES250
<b>Odometer:</b>	619 km (385 miles)	Unknown
<b>Engine:</b>	1.9 L EFI I 4	Unknown
<b>Vehicle Modifications:</b>	None	None
<b>Tire Condition:</b>	New	Unknown
<b>Manual Restraints:</b>	Manual lap at LF and RF. 3-point manual lap/shoulder restraints at LR and RR positions.	3-point manual lap/shoulder restraints at LF, RF, LR, and RR positions.
<b>Automatic Restraints:</b>	Automatic shoulder belt at LF and RF; supplemental restraint systems (driver's and passenger's side airbags)	Supplemental restraint systems (driver's side airbag) per VIN
<b>Reported Defects:</b>	None	None
<b>Cargo:</b>	Unknown	Unknown
<b>Windshield Damage:</b>	None	None
<b>Fleet:</b>	NA	NA
<b>Tow Status:</b>	Towed due to damage.	Driven away

**VEHICLE DAMAGE:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Object Struck:</b>	02	01
<b>Event Number:</b>	01	01
<b>CDC:</b>	12FZEW1	07LBEW2
<b>Maximum Crush:</b>	15 cm (6.0 in.)	13 cm (5.0 in.)

**VEHICLE VELOCITY ESTIMATES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Impact Speed: (estimated)</b>	Minimum pre-braking travel speed 33 KPH (21 MPH)	Unknown
<b>Total Delta V:</b>	11 KPH (7 MPH)	8 KPH (5 MPH)
<b>Longitudinal Delta V:</b>	-11 KPH (-7 MPH)	+5 KPH (+3 MPH)
<b>Lateral Delta V:</b>	0	+6 KPH (+4 MPH)
<b>Energy Dissipation:</b>	7408.2 joules (5447.2 FT-LB)	6222.8 joules (5447.2 FT-LB)

The following stiffness values were used during the EDCRASH run: Vehicle 1 (a=216, b=93).

The travel speed calculations based upon:

$$S = 5.5\sqrt{Df}$$

where

$S$  = minimum speed at commencement of skid mark

$D$  = skid distance

$f$  = coefficient of friction

Substituting/solving:

$$S = 5.5\sqrt{18 * 0.70} = 19.5 \text{ MPH} = 31.4 \text{ KPH}$$

Calculate combined speeds using velocity change as an impact speed:

$$S = \sqrt{S_1^2 + S_2^2}$$

Where:

$S_1$  = skid speed = 19.5 MPH

$S_2$  = velocity change = 6.6 MPH

$$S = \sqrt{19.5^2 + 6.6^2} = 20.6 \text{ MPH} = 33.1 \text{ KPH}$$



## **COLLISION SEQUENCE:**

**Pre-Crash:** This low-speed collision occurred at the intersection of a straight roadway and an interstate on/off ramp during the morning hours of a fall weekday. The weather was clear and dry and there were no visual obstructions.

Vehicle 1, a 1995 Ford Escort driven by a 21-year-old female, was traveling west on a 5-lane divided roadway approaching the intersection. Vehicle 1 was equipped with both driver and passenger side supplemental restraint systems (airbags). The passenger side airbag is a mid-mount setup. The driver was wearing the available automatic shoulder belt with manual lap belt. The right front seat was occupied by a 6-month-old male seated in a Century 565 child safety seat. The child seat was in the rearward facing position. This would put the forward facing edge of the seat approximately 23 cm (9 in.) from the face of the instrument panel (see page 10). The bucket seat was, according to the driver, in the most rearward position. The child seat was secured through the base with both the lap and shoulder belt. No locking clip was used.

Vehicle 2, a 1991 Lexus ES20 driven by a 51-year-old male, was traveling eastbound approaching the same intersection.

**Crash:** As Vehicle 2 entered the intersection, the driver decided to make a left-hand turn onto the on-ramp. At this location, however, the on-ramp access is limited to high-occupancy vehicles. The driver continued turning to make a U-turn going west. The traffic signal had changed by this time and Vehicle 1 entered the intersection. The driver of Vehicle 1 saw Vehicle 2. The driver braked, leaving 5.4 M (18 ft.) of pre-impact skid marks. Vehicle 1 struck the left rear bumper corner of Vehicle 2. Both airbags deployed at this point. The passenger side airbag struck the rear of the child safety seat. The left side of the carrying handle, which was in the down position, broke and was forced upward into the carrying position. There is no indication that the handle came into contact with this occupant. The child seat was forced rearward and upward by the deployment. There is no evidence that the module cover was involved.

**Post Crash:** The driver of Vehicle 1 sustained contusions to both of her inner arms and to her abdomen. The right front occupant of Vehicle 1 sustained a 4 mm linear fracture to the left parietal bone, as well as a possible subdural hematoma, due to contact from the child safety seat back. He did not lose consciousness. He was transported by ambulance to an emergency room. He was treated at this location and transferred later that same day to a second hospital where he was hospitalized overnight for observation. At this time, it appears that the child has fully recovered.

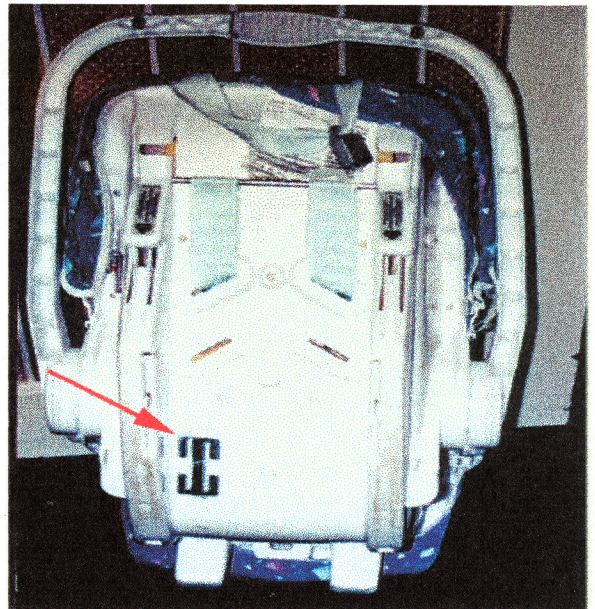
**Occupant  
Kinematics:**

Prior to impact, the driver of Vehicle 1 braked, probably loading the lap and shoulder belts prior to impact. At impact, the driver of Vehicle 1 would have gone straight forward into the deploying airbag. The driver had both hands on the steering wheel and was bracing for the impact. At deployment, the airbag struck the inner side of both arms causing minor contusions. The driver also sustained a contusion to the abdomen, possibly due to contact with the lap belt.

Prior to the collision, the driver had placed the child seat in the right front seat. The harness clip was adjusted to the child's arm pit height and the shoulder harness straps were snugged to the child. The lap and shoulder belts were routed through the slots on the arms of the child seat (see Figure 3).

According to the Century customer service line, for a vehicle with an automatic shoulder harness, the proper method of installation would involve only the properly tightened manual lap belt and the locking clip. The shoulder harness should be detached so the motor drive does not move the belt. The locking clip in this case was not used (see Figure 1). The carrying handle was in the "down" position at the time of impact; that is, it was facing toward the front of the vehicle. At impact, the airbag deployed and pushed the child seat rearward and upward. The carrying handle was broken and the left half was pushed upward toward the "up" position.

There was no other damage to the seat. The child sustained a blow to the back of his head from the child seat itself. There is no indication that the carrying handle ever contacted the child.



**Figure 1.** Bottom/rear of seat showing locking clip still attached to seat.



**Figure 2.** Child seat, shows broken carrying handle





**Figure 3. Lap/shoulder belt usage**

**Supplemental  
Restraint System:**

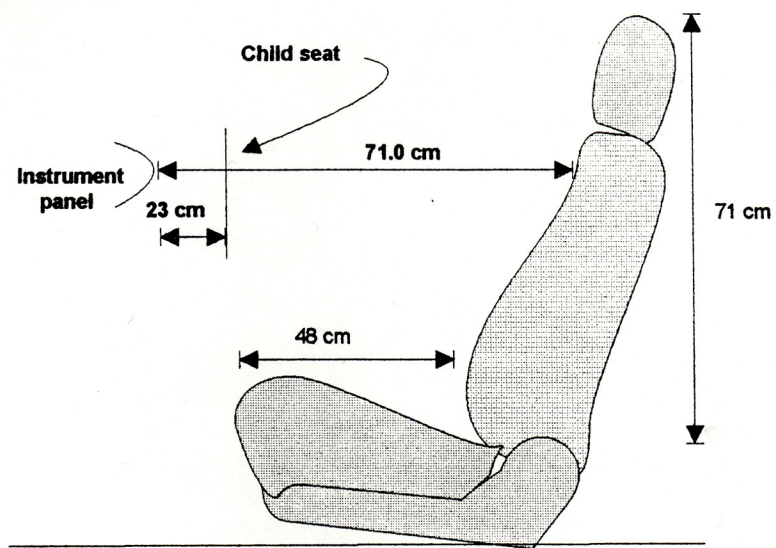
Vehicle 1 was equipped with both a driver's and right front passenger airbag. Both airbags appear to have properly deployed. Neither airbag sustained any damage, nor were there any indications of contact with the airbag module covers.

**Scene Clearance:**

Vehicle 1 was towed from the scene due to damage. Vehicle 2 was driven from the scene.

**Safety Standards:**

There were no violations of Federal Motor Vehicle Safety Standards and Regulations found during the inspection of the case vehicle. The owner's manual states that the deployment threshold for the supplemental restraint system is 8 MPH. The calculated Delta V for this crash is 6.6 MPH. Although the CRASH III PC program yields only an approximation of actual velocity changes, it would appear that the airbags deployed at the lowest anticipated levels of force.



**Seat in rear-most position**

**DRIVER AND OTHER OCCUPANTS:**

**VEHICLE 1**

	<b>DRIVER</b>	<b>OCCUPANT 2</b>
<b>Age/Sex:</b>	21/Female	6 mos./Male
<b>Seated Position:</b>	Left front	Right front
<b>Seat Type:</b>	Bucket with folding back	Bucket with folding back
<b>Height:</b>	160 cm (63 in.)	61 cm (24 in.)
<b>Weight:</b>	82 kg (180 lbs.)	10 kg (22 lbs.)
<b>Occupation:</b>	Unknown	NA
<b>Pre-existing Medical Condition:</b>	Unknown	Unknown
<b>Alcohol/Drug Involvement:</b>	None	None
<b>Driving Experience:</b>	Unknown	NA
<b>Body Posture:</b>	Unknown	Supine, facing backwards
<b>Hand Position:</b>	Unknown	NA
<b>Foot Position:</b>	Right foot on brake	NA
<b>Restraint Usage:</b>	Lap and shoulder used, driver's side airbag.	Lap and shoulder belts routed through the slots on the arms of the child seat. Passenger's side airbag.
<b>Additional Occupants:</b>	None	

**DRIVER AND OTHER OCCUPANTS (con't):**

**VEHICLE 2**

**DRIVER**

<b>Age/Sex:</b>	51/Male
<b>Seated Position:</b>	Left front
<b>Seat Type:</b>	Bucket
<b>Height:</b>	170 cm (67 in.)
<b>Weight:</b>	79 kg (175 lbs.)
<b>Occupation:</b>	Unknown
<b>Pre-existing Medical Condition:</b>	Unknown
<b>Alcohol Involvement:</b>	None
<b>Driving Experience:</b>	Unknown
<b>Body Posture:</b>	Unknown
<b>Hand Position:</b>	Unknown
<b>Foot Position:</b>	Right foot presumed to be on accelerator
<b>Restraint Usage:</b>	Lap and shoulder used, driver's side airbag per VIN. Deployment status unknown.
<b>Additional Occupants:</b>	None

**INJURIES:****Vehicle 1**

	<b><u>INJURY</u></b>	<b><u>OIC CODE</u></b>	<b><u>ICD-9</u></b>	<b><u>SOURCE</u></b>
<b>DRIVER:</b>	Contusion, inner left arm	790402.1,2	923.10	Airbag
	Contusion, inner right arm	790402.1,1	923.10	Airbag
	Contusion, abdomen	590402.1,9	922.2	Lap/shoulder restraint
<b>R/F OCCUPANT:</b>	Left parietal skull fracture with possible small underlying subdural hematoma contusion <sup>1</sup>	150400.2,2	800.01	Child seat back

**Vehicle 2**

	<b><u>INJURY</u></b>	<b><u>OIC CODE</u></b>	<b><u>ICD-9</u></b>	<b><u>SOURCE</u></b>
<b>DRIVER:</b>	Not injured			

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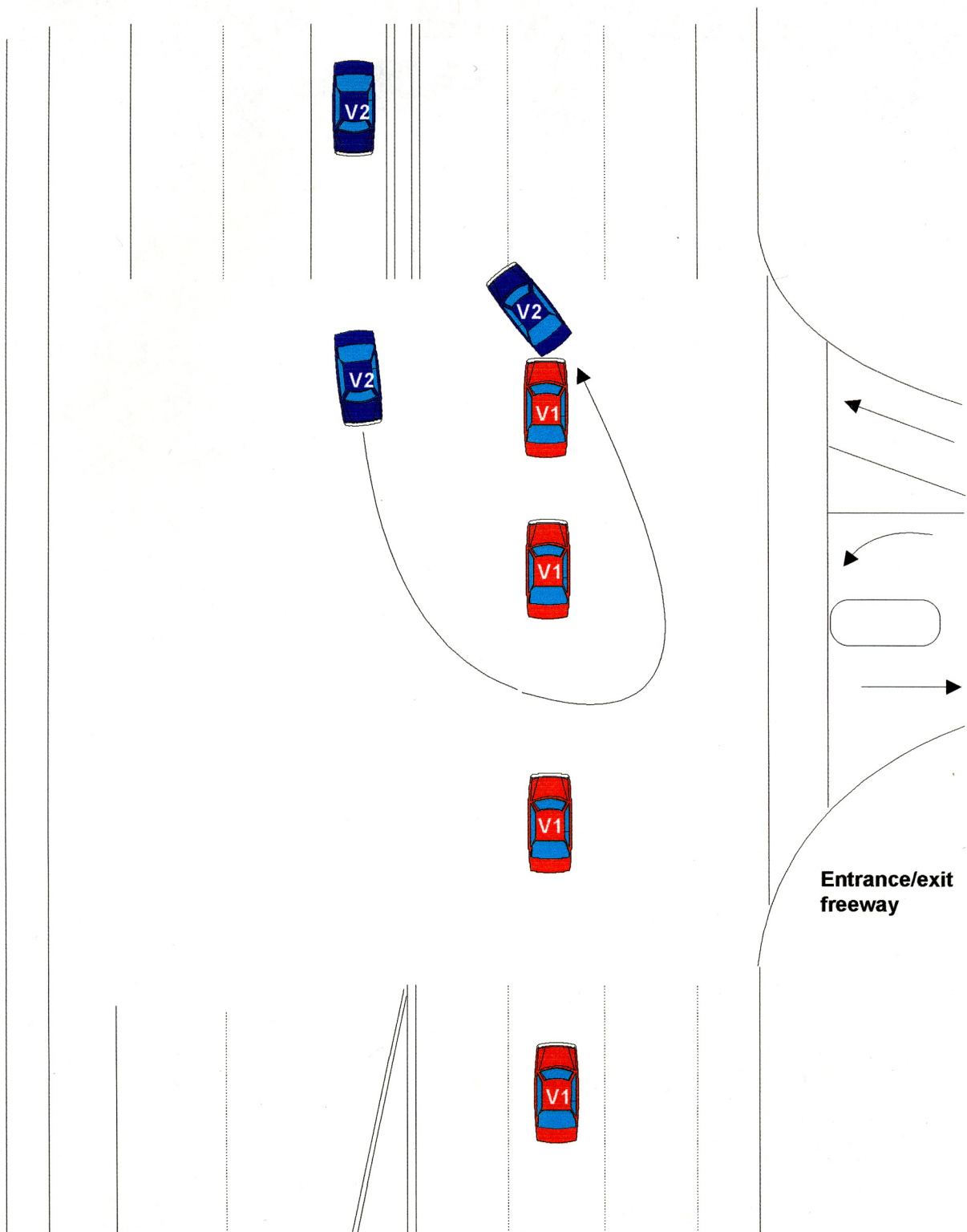
<sup>1</sup> Possible contusion not codeable



### **Abbreviations Used In Scene And Photographic Documentation**

ft	Feet
in	Inches
AIS	Abbreviated Injury Scale
BLF	Begin Left Front
BLR	Begin Left Rear
BRF	Begin Right Front
BRR	Begin Right Rear
CBE	Cab Behind Engine
CCW	Counterclockwise
CDC	Collision Deformation Classification
CG	Center of Gravity
CM	Centimeter
COE	Cab Over Engine
CW	Clockwise
E, EB	East, Eastbound
ELF	End Left Front
ELR	End Left Rear
ERF	End Right Front
ERR	End Right Rear
FRP	Final Rest Position
I	Interstate Highway
KG	Kilogram
KPH	Kilometers Per Hour
LF	Left Front
LR	Left Rear
M	Meter
N, NB	North, Northbound
NE	Northeast
NW	Northwest
PDOF	Principal Direction of Force
POI	Point of Impact
R	Radius of Curvature
RF	Right Front
RL	Reference Line
RP	Reference Point
RR	Right Rear
S, SB	South, Southbound
SE	Southeast
SW	Southwest
T	Time or Elapsed Time (in seconds)
U.S.	United States Highway
V1	Vehicle Number 1
W, WB	West, Westbound





**Case Number: DSI-95-AB-22**

**Scale: 1"=20'**



## PHOTO INDEX

Case No. DSI-95-AB-22

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1-3	1	West	Approach to area of impact.
4	1	West	Area of impact.
5-6	2	East	Approach to area of impact.
7	2	Southeast	Area of impact.
8	-	Southwest	Overview of impact area.
9-13	1	CW	Exterior of vehicle.
14-16	1	NA	Interior of vehicle.
17-19	1	NA	Views of child safety seat.
20	1	NA	Shows belt instruction regarding clip usage.
21	1	NA	Shows child seat in place in vehicle.
22	1	NA	Loading marks on LF belt.
23-28	1	NA	Close up views of airbags.
29-30	1	NA	Close up view of loading marks.
31	1	NA	Shows child involved in this collision as he was seated during collision.
32-35	1	NA	Shows additional instructions present on child seat.
36-38	2	NA	Exterior of vehicle.















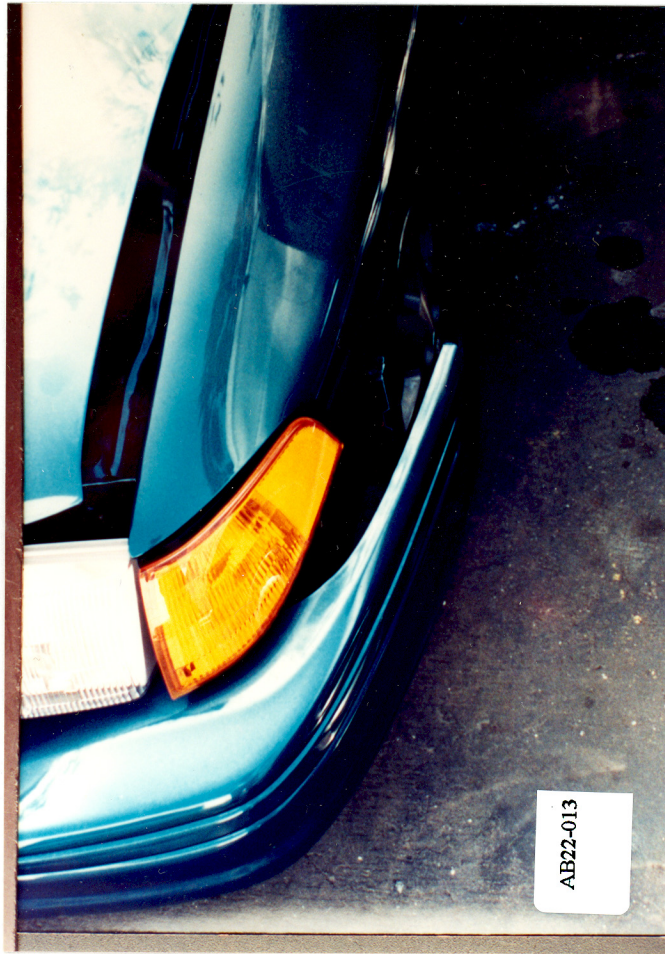






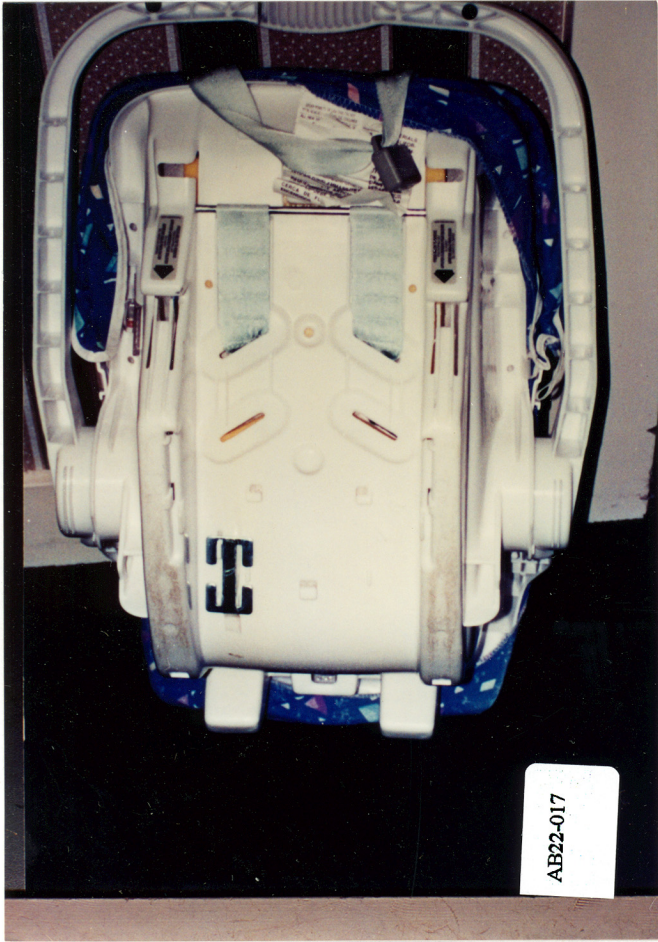








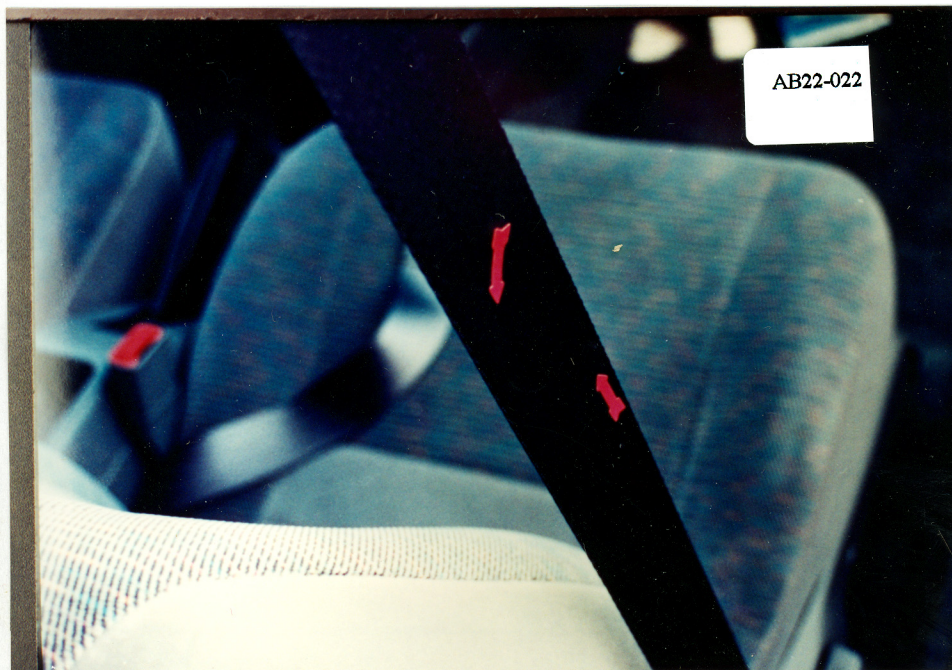
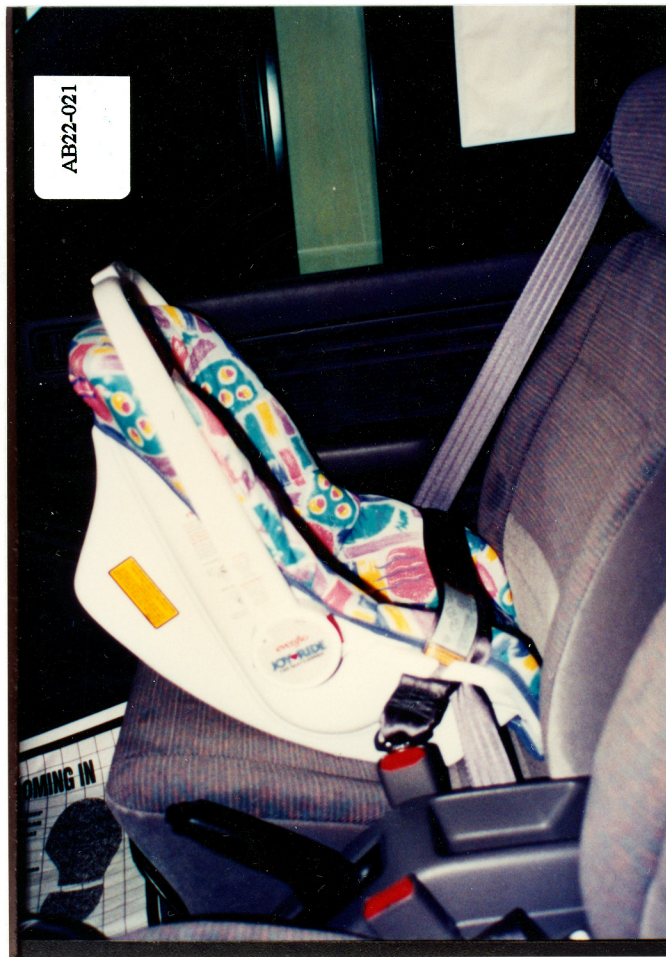




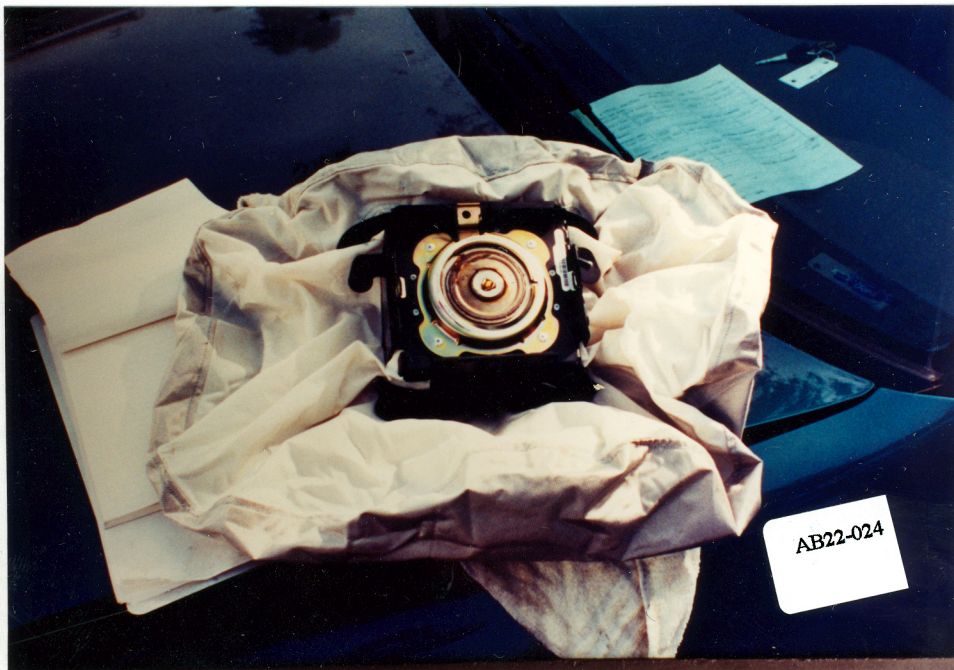
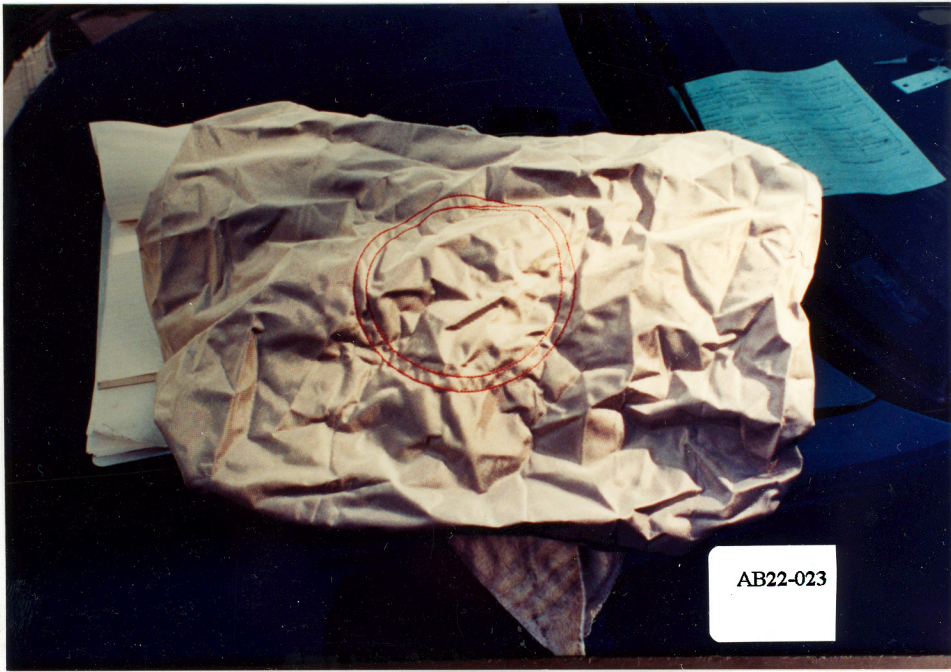








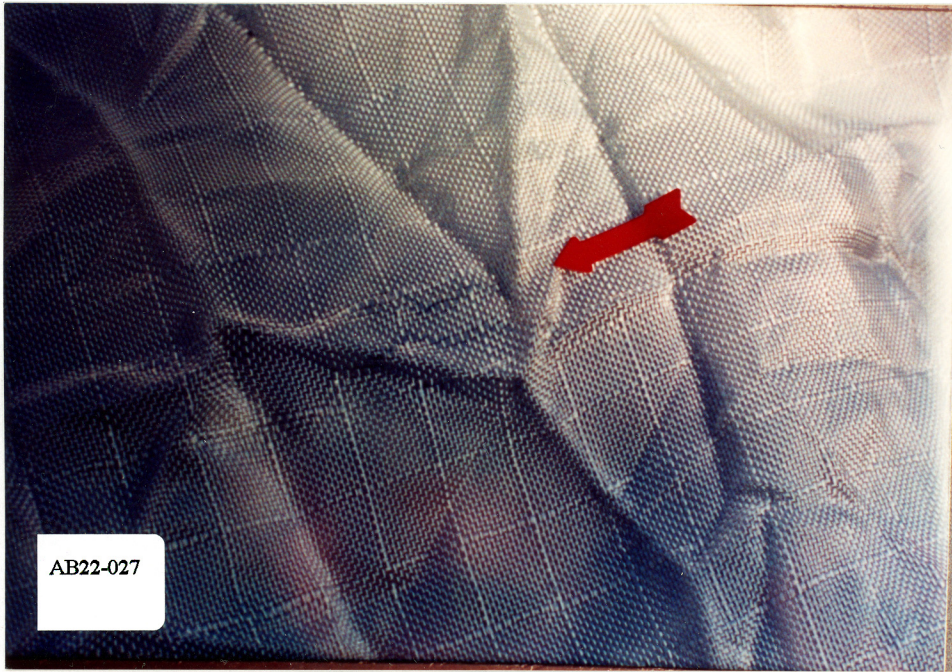




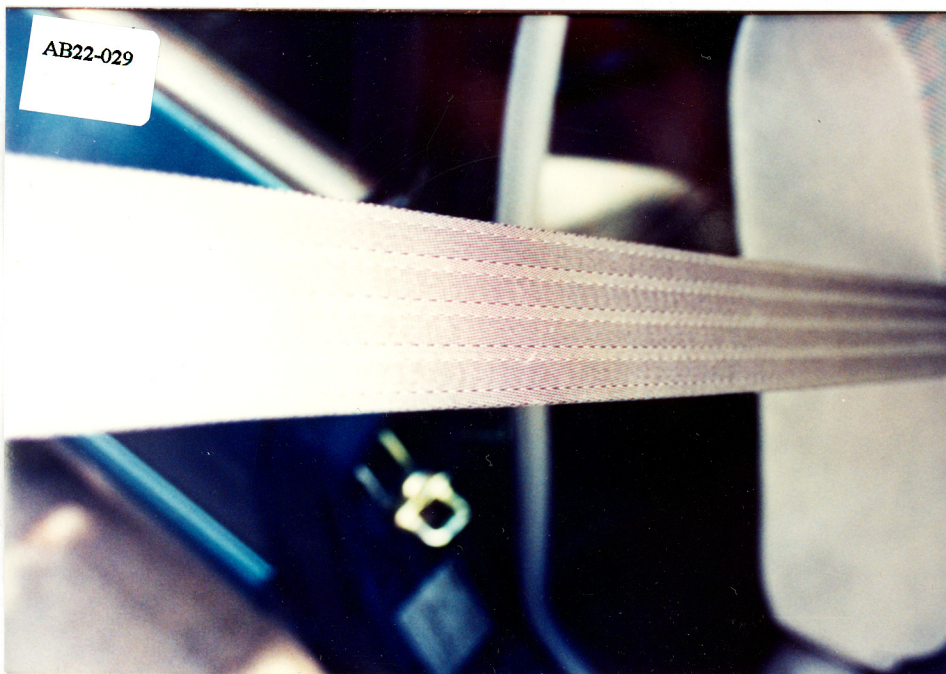




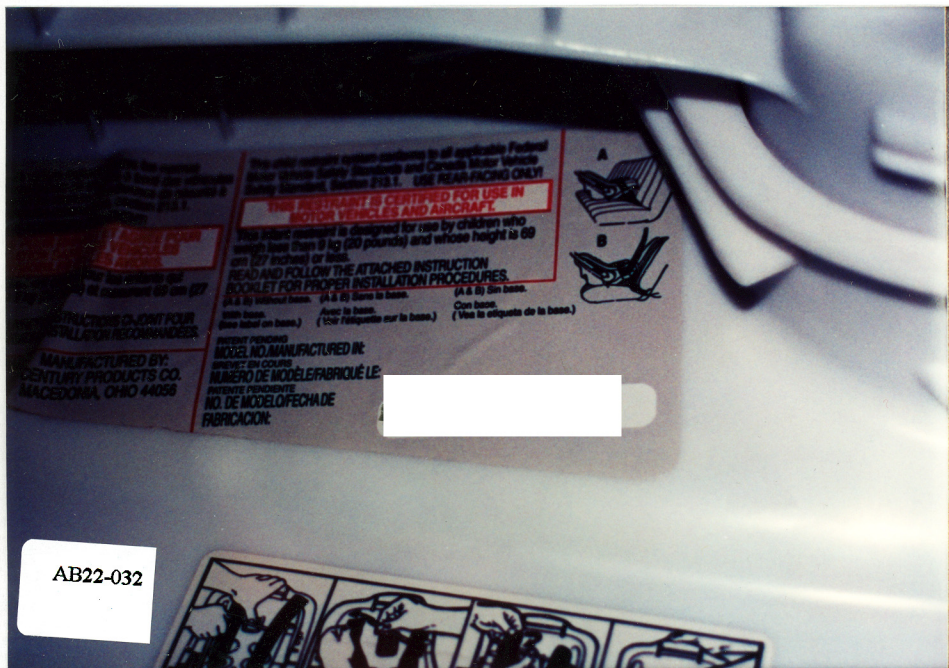






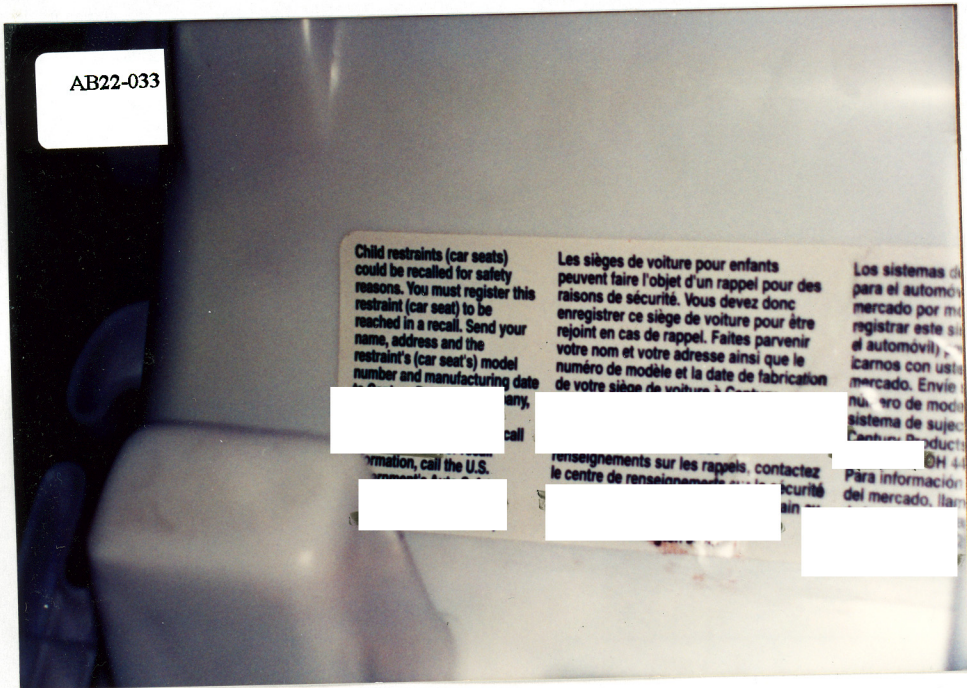








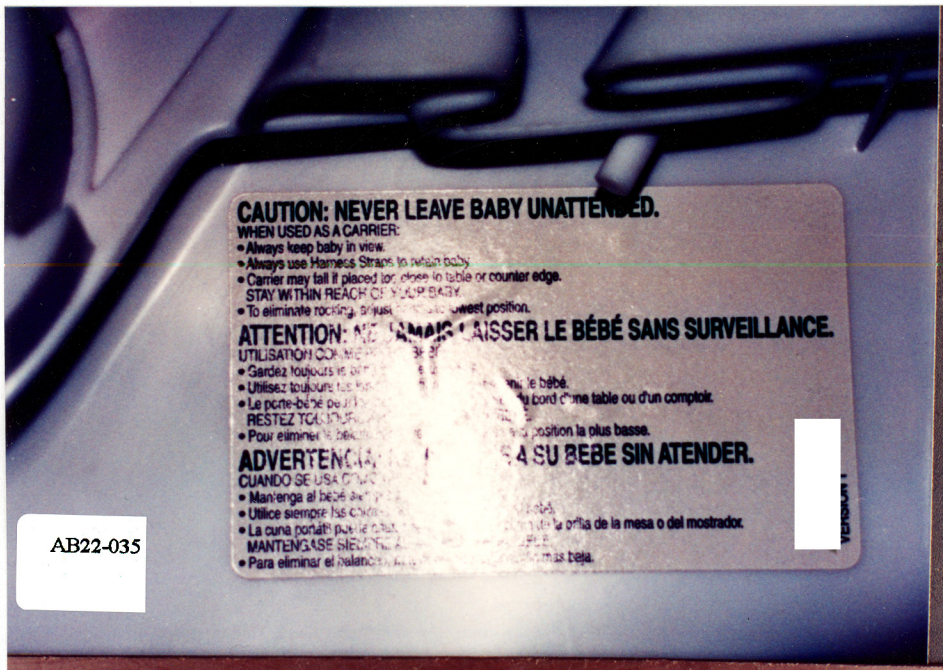
AB22-033



AB22-034













## ACCIDENT FORM

1. Primary Sampling Unit Number \_\_\_\_\_

2. Case Number - Stratum AB 22

## IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted 024. Date of Accident FALL  
(Month, Day, Year) \_\_\_\_\_ / \_\_\_\_\_ / 9 55. Time of Accident MORNING

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

## SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. \_\_\_\_\_ SS15 Administrative Use 47. \_\_\_\_\_ SS16 Pedestrian Crash Data Study 0  
(Data for this special study available  
in a separate file.)8. \_\_\_\_\_ SS17 Impact Fires 49. \_\_\_\_\_ SS18 Unsafe Driver Actions 4

10. \_\_\_\_\_ SS19 \_\_\_\_\_

## NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident 4 /Code the number of events which occurred  
in this accident.

## ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>4 1</u>	14. <u>0 1</u>	15. <u>F</u>	16. <u>0 2</u>	17. <u>0 2</u>	18. <u>L</u>
19. <u>0 2</u>	20. _____	21. _____	22. _____	23. _____	24. _____	25. _____
26. <u>0 3</u>	27. _____	28. _____	29. _____	30. _____	31. _____	32. _____
33. <u>0 4</u>	34. _____	35. _____	36. _____	37. _____	38. _____	39. _____
40. <u>0 5</u>	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>(00) Not a motor vehicle</li> <li>(01) Subcompact/mini (wheelbase &lt; 254 cm)</li> <li>(02) Compact (wheelbase ≥ 254 but &lt; 265 cm)</li> <li>(03) Intermediate (wheelbase ≥ 265 but &lt; 278 cm)</li> <li>(04) Full size (wheelbase ≥ 278 but &lt; 291 cm)</li> <li>(05) Largest (wheelbase ≥ 291 cm)</li> <li>(09) Unknown passenger car size</li> <li>(14) Compact utility vehicle</li> <li>(15) Large utility vehicle (≤ 4,500 kgs GVWR)</li> <li>(16) Utility station wagon (≤ 4,500 kgs GVWR)</li> <li>(19) Unknown utility type</li> <li>(20) Minivan (≤ 4,500 kgs GVWR)</li> <li>(21) Large van (≤ 4,500 kgs GVWR)</li> <li>(24) Van Based school bus (≤ 4,500 kgs GVWR)</li> <li>(28) Other van type (≤ 4,500 kgs GVWR)</li> <li>(29) Unknown van type (≤ 4,500 kgs GVWR)</li> <li>(30) Compact pickup truck (≤ 4,500 kgs GVWR)</li> </ul> | <ul style="list-style-type: none"> <li>(31) Large pickup truck (≤ 4,500 kgs GVWR)</li> <li>(38) Other pickup truck (≤ 4,500 kgs GVWR)</li> <li>(39) Unknown pickup truck type (≤ 4,500 kgs GVWR)</li> <li>(45) Other light truck (≤ 4,500 kgs GVWR)</li> <li>(48) Unknown light truck type (≤ 4,500 kgs GVWR)</li> <li>(49) Unknown light vehicle type</li> <li>(50) School bus (excludes van based)(&gt; 4,500 kgs GVWR)</li> <li>(58) Other bus (&gt; 4,500 kgs GVWR)</li> <li>(59) Unknown bus type</li> <li>(60) Truck (&gt; 4,500 kgs GVWR)</li> <li>(67) Tractor without trailer</li> <li>(68) Tractor-trailer(s)</li> <li>(78) Unknown medium/heavy truck type</li> <li>(79) Unknown light/medium/heavy truck type</li> <li>(80) Motored cycle</li> <li>(90) Other vehicle</li> <li>(99) Unknown</li> </ul> |
|--|--|

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

- |  |  |   |   |
|--|--|---|---|
| <b>CDS APPLICABLE<br/>AND OTHER<br/>VEHICLES</b> | <ul style="list-style-type: none"> <li>(0) Not a motor vehicle</li> <li>(N) Noncollision</li> <li>(F) Front</li> </ul> | <ul style="list-style-type: none"> <li>(R) Right side</li> <li>(L) Left side</li> <li>(B) Back</li> </ul> | <ul style="list-style-type: none"> <li>(T) Top</li> <li>(U) Undercarriage</li> <li>(9) Unknown</li> </ul> |
|--|--|---|---|
- 
- |  |  |   |   |
|--|--|---|---|
| <b>TDC<br/>APPLICABLE<br/>VEHICLES</b> | <ul style="list-style-type: none"> <li>(0) Not a motor vehicle</li> <li>(N) Noncollision</li> <li>(F) Front</li> <li>(R) Right side</li> </ul> | <ul style="list-style-type: none"> <li>(L) Left side</li> <li>(B) Back of unit with cargo area<br/>(rear of trailer or straight truck)</li> <li>(D) Back (rear of tractor)</li> </ul> | <ul style="list-style-type: none"> <li>(C) Rear of cab</li> <li>(V) Front of cargo area</li> <li>(T) Top</li> <li>(U) Undercarriage</li> <li>(9) Unknown</li> </ul> |
|--|--|---|---|

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

- |   |  |
|---|--|
| <p>(01-30) — Vehicle Number</p> <p>Noncollision</p> <ul style="list-style-type: none"> <li>(31) Overturn — rollover (excludes end-over-end)</li> <li>(32) Rollover — end-over-end</li> <li>(33) Fire or explosion</li> <li>(34) Jackknife</li> <li>(35) Other intraunit damage (specify): _____</li> <li>(36) Noncollision injury</li> <li>(38) Other noncollision (specify): _____</li> <li>(39) Noncollision — details unknown</li> </ul> <p>Collision With Fixed Object</p> <ul style="list-style-type: none"> <li>(41) Tree (≤ 10 cm in diameter)</li> <li>(42) Tree (&gt; 10 cm in diameter)</li> <li>(43) Shrubbery or bush</li> <li>(44) Embankment</li> <li>(45) Breakaway pole or post (any diameter)</li> </ul> <p>Nonbreakaway Pole or Post</p> <ul style="list-style-type: none"> <li>(50) Pole or post (≤ 10 cm in diameter)</li> <li>(51) Pole or post (&gt; 10 cm but ≤ 30 cm in diameter)</li> <li>(52) Pole or post (&gt; 30 cm in diameter)</li> <li>(53) Pole or post (diameter unknown)</li> <li>(54) Concrete traffic barrier</li> <li>(55) Impact attenuator</li> <li>(56) Other traffic barrier (includes guardrail)<br/>(specify): _____</li> </ul> | <ul style="list-style-type: none"> <li>(57) Fence</li> <li>(58) Wall</li> <li>(59) Building</li> <li>(60) Ditch or culvert</li> <li>(61) Ground</li> <li>(62) Fire hydrant</li> <li>(63) Curb</li> <li>(64) Bridge</li> <li>(68) Other fixed object (specify): _____</li> <li>(69) Unknown fixed object</li> </ul> <p>Collision with Nonfixed Object</p> <ul style="list-style-type: none"> <li>(70) Passenger car, light truck, van, or other vehicle not in-transport</li> <li>(71) Medium/heavy truck or bus not in-transport</li> <li>(72) Pedestrian</li> <li>(73) Cyclist or cycle</li> <li>(74) Other nonmotorist or conveyance</li> <li>(75) Vehicle occupant</li> <li>(76) Animal</li> <li>(77) Train</li> <li>(78) Trailer, disconnected in transport</li> <li>(79) Object fell from vehicle in-transport</li> <li>(88) Other nonfixed object (specify): _____</li> <li>(89) Unknown nonfixed object</li> <li>(98) Other event (specify): _____</li> <li>(99) Unknown event or object</li> </ul> |
|---|--|



## GENERAL VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

12. Speed Limit

(000) No statutory limit

Code posted or statutory speed limit  
in kmph

(999) Unknown

## VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

7. Body Type

Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines

9. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

## OFFICIAL RECORDS

10. Police Reported Vehicle Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

11. Police Reported Travel Speed

Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

\_\_\_\_ mph X 1.6093 = \_\_\_\_ kmph

13. Police Reported Alcohol Presence For Driver

- (0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

14. Alcohol Test Result For Driver

Code actual value (decimal implied  
before first digit—0.xx)

- (95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: \_\_\_\_\_

15. Police Reported Other Drug Presence For  
Driver

- (0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown

16. Other Drug Specimen Test Result For Driver

- (0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify):  
(3) Specimen test given, results unknown or not  
obtained  
(8) No driver present  
(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin

- (1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify):  
(8) No driver present  
(9) Unknown



# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

**PRECRASH ENVIRONMENTAL DATA**

19. Relation To Interchange Or Junction 2  
 (0) Non-interchange area and non-junction  
 (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 1  
 (0) Not physically divided (two way traffic)  
 (1) Divided trafficway-median strip without positive barrier  
 (2) Divided trafficway-median strip with positive barrier  
 (3) One way traffic  
 (9) Unknown

21. Number Of Travel Lanes 3  
 (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
 (5) Five  
 (6) Six  
 (7) Seven or more  
 (9) Unknown

22. Roadway Alignment 1  
 (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown

23. Roadway Profile 2  
 (1) Level  
 (2) Uphill grade (>2%)  
 (3) Hill crest  
 (4) Downhill grade (>2%)  
 (5) Sag  
 (9) Unknown

24. Roadway Surface Type 1  
 (1) Concrete  
 (2) Bituminous (asphalt)  
 (3) Brick or block  
 (4) Slag, gravel, or stone  
 (5) Dirt  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

25. Roadway Surface Condition 1  
 (1) Dry  
 (2) Wet  
 (3) Snow or slush  
 (4) Ice  
 (5) Sand, dirt, or oil  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

26. Light Conditions 1  
 (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown

27. Atmospheric Conditions φ  
 (0) No adverse atmospheric-related driving conditions  
 (1) Rain  
 (2) Sleet/hail  
 (3) Snow  
 (4) Fog  
 (5) Rain and fog  
 (6) Sleet and fog  
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
 (9) Unknown

28. Traffic Control Device 1  
 (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)  
  
*Regulatory*  
 (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_  
 (6) Warning sign (not RR crossing)  
 (7) Unknown sign  
 (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_  
 (9) Unknown

29. Traffic Control Device Functioning 2  
 (0) No traffic control device  
 (1) Traffic control device not functioning (specify) \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown

**PRECRASH DRIVER RELATED DATA**

30. Driver's Distraction/Inattention To Driving Φ 1  
 (Prior To Recognition Of Critical Event)  
 (00) No driver present  
 (01) Attentive or not distracted  
 (02) Looked but did not see  
*Distractions*  
 (03) By other occupant(s), (specify): \_\_\_\_\_  
 (04) By moving object in vehicle (specify): \_\_\_\_\_  
 (05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_  
 (06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_  
 (07) While adjusting climate controls  
 (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_  
 (09) While using other device/object in vehicle (specify): \_\_\_\_\_  
 (10) Sleepy or fell asleep  
 (11) Distracted by outside person, object, or event (specify): \_\_\_\_\_  
 (12) Eating or drinking  
 (13) Smoking related  
 (97) Distracted/inattentive, details unknown  
 (98) Other, distraction (specify): \_\_\_\_\_  
 (99) Unknown
31. Pre-Event Movement (Prior to Recognition of Critical Event) Φ 1  
 (00) No driver present  
 (01) Going straight  
 (02) Decelerating in traffic lane  
 (03) Accelerating in traffic lane  
 (04) Starting in traffic lane  
 (05) Stopped in traffic lane  
 (06) Passing or overtaking another vehicle  
 (07) Disabled or parked in travel lane  
 (08) Leaving a parking position  
 (09) Entering a parking position  
 (10) Turning right  
 (11) Turning left  
 (12) Making a U-turn  
 (13) Backing up (other than for parking position)  
 (14) Negotiating a curve  
 (15) Changing lanes  
 (16) Merging  
 (17) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify): \_\_\_\_\_  
 (99) Unknown
32. Critical Precrash Event 6 2  
*This Vehicle Loss of Control Due To:*  
 (01) Blow out or flat tire  
 (02) Stalled engine  
 (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_  
 (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_  
 (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_  
 (06) Traveling too fast for conditions  
 (08) Other cause of control loss (specify): \_\_\_\_\_  
 (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane  
 (11) Over the lane line on right side of travel lane  
 (12) Off the edge of the road on the left side  
 (13) Off the edge of the road on the right side  
 (14) End departure  
 (15) Turning left at intersection  
 (16) Turning right at intersection  
 (17) Crossing over (passing through) intersection  
 (18) This vehicle decelerating  
 (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Other vehicle stopped  
 (51) Traveling in same direction with lower steady speed  
 (52) Traveling in same direction while decelerating  
 (53) Traveling in same direction with higher speed  
 (54) Traveling in opposite direction  
 (55) In crossover  
 (56) Backing  
 (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line  
 (61) From adjacent lane (same direction)—over right lane line  
 (62) From opposite direction—over left lane line  
 (63) From opposite direction—over right lane line  
 (64) From parking lane  
 (65) From crossing street, turning into same direction  
 (66) From crossing street, across path  
 (67) From crossing street, turning into opposite direction  
 (68) From crossing street, intended path not known  
 (70) From driveway, turning into same direction  
 (71) From driveway, across path  
 (72) From driveway, turning into opposite direction  
 (73) From driveway, intended path not known  
 (74) From entrance to limited access highway  
 (78) Encroachment by other vehicle—details unknown

*Pedestrian, Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway  
 (81) Pedestrian approaching roadway  
 (82) Pedestrian—unknown location  
 (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_  
 (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_  
 (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway  
 (88) Animal approaching roadway  
 (89) Animal—unknown location  
 (90) Object in roadway  
 (91) Object approaching roadway  
 (92) Object—unknown location  
 (98) Other critical precrash event (specify): \_\_\_\_\_  
 (99) Unknown

33. Attempted Avoidance Maneuver φ 3

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 7 7

(Note: Applicable codes on back of this page)

- (00) No impact  
Code the number of the diagram that best describes the accident circumstance
- (98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**

**OCCUPANT RELATED**

37. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
38. Number of Occupants This Vehicle 0 2  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
39. Number of Occupant Forms Submitted 0 2

**AIR BAG RELATED**

40. Is this an AOPS Vehicle? 1  
 (0) No (includes unknown)  
 (1) Yes - researcher determined  
 (2) VIN determined air bag system  
 (3) VIN determined automatic (passive) belts  
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 6  
 (0) Not equipped or not available  
 (1) No air bags deployed  
*Single Air Bag Vehicle*  
 (2) Driver air bag deployed  
 (3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
 (4) Driver side only deployed  
 (5) Passenger side only deployed  
 (6) Driver and passenger side deployed  
 (7) Driver and passenger side unknown if deployed  
 (8) Air bag(s) deployed, details unknown  
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
 (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

**VEHICLE WEIGHT ITEMS**

43. Vehicle Curb Weight 1 0 4 0  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
2 2 9 6 lbs X .4536 = 1 0 4 1 kgs

Source: \_\_\_\_\_

44. Vehicle Cargo Weight 9 9 9 0  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

Source: \_\_\_\_\_

**ROLLOVER DATA**

45. Rollover 0 0  
 (00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (01-16) Code the number of quarter turns  
 (17) Rollover, 17 or more quarter turns (specify):  
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 0 0  
 (00) No rollover  
 (01) Trip-over  
 (02) Flip-over  
 (03) Turn-over  
 (04) Climb-over  
 (05) Fall-over  
 (06) Bounce-over  
 (07) Collision with another vehicle  
 (08) Other rollover initiation type specify):  
 (98) Rollover--end-over-end  
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
 (0) No rollover  
 (1) On roadway  
 (2) On shoulder--paved  
 (3) On shoulder--unpaved  
 (4) On roadside or divided trafficway median  
 (8) Rollover--end-over-end  
 (9) Unknown
48. Rollover Initiation Object Contacted 0 0  
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
 (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify):  
 (6) Non-contact rollover forces (specify):  
 (8) Rollover--end-over-end  
 (9) Unknown
50. Direction of Initial Roll 0  
 (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (8) Rollover--end-over-end  
 (9) Unknown roll direction

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover  
(01-30) — Vehicle Number
- Noncollision  
(31) Turn-over — fall-over  
(32) No rollover impact initiation (end-over-end)  
(34) Jackknife
- Collision With Fixed Object  
(41) Tree ( $\leq 10$  cm in diameter)  
(42) Tree ( $> 10$  cm in diameter)  
(43) Shrubbery or bush  
(44) Embankment  
(45) Breakaway pole or post (any diameter)
- Nonbreakaway Pole or Post  
(50) Pole or post ( $\leq 10$  cm in diameter)  
(51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)  
(52) Pole or post ( $> 30$  cm in diameter)  
(53) Pole or post (diameter unknown)  
(54) Concrete traffic barrier  
(55) Impact attenuator  
(56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_
- (57) Fence  
(58) Wall  
(59) Building  
(60) Ditch or culvert  
(61) Ground  
(62) Fire hydrant  
(63) Curb  
(64) Bridge  
(68) Other fixed object (specify): \_\_\_\_\_  
(69) Unknown fixed object \_\_\_\_\_
- Collision with Nonfixed Object  
(70) Passenger car, light truck, van, or other vehicle not in-transport  
(71) Medium/heavy truck or bus not in-transport  
(76) Animal  
(77) Train  
(78) Trailer, disconnected in transport  
(79) Object fell from vehicle in-transport  
(88) Other nonfixed object (specify): \_\_\_\_\_  
(89) Unknown nonfixed object \_\_\_\_\_  
(98) Other event (specify): \_\_\_\_\_  
(99) Unknown event or object \_\_\_\_\_

OVERRIDE/UNDERRIDE (THIS VEHICLE)	ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V
51. Front Override/Underride (this Vehicle) <span style="float: right;"><u>φ</u></span> 52. Rear Override/Underride (this Vehicle) <span style="float: right;"><u>φ</u></span> (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride Override (see specific CDC) [Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)] (1) 1st CDC (2) 2nd CDC (3) Other not automated CDC (specify): _____ Underride (see specific CDC) [Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)] (4) 1st CDC (5) 2nd CDC (6) Other not automated CDC (specify): _____ (7) Medium/heavy truck or bus override (of any configuration) (9) Unknown	58. Basis for Total (Resultant) Delta V (highest) <span style="float: right;"><u>φ /</u></span> (00) No vehicle inspection Delta V Calculated (01) Reconstruction program -damage only routine (02) Reconstruction program -damage and trajectory routine (03) Missing vehicle algorithm Delta V Not Calculated (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions. All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data. (05) Rollover (06) Other non-horizontal forces (07) Sideswipe type damage (08) Severe override (09) Yielding object (10) Overlapping damage (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available. (98) Other, (specify): _____
HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V	
Values: (000)-(359) Code actual value (997) Noncollision (998) Impact with object (999) Unknown 53. Heading Angle For This Vehicle <span style="float: right;"><u>2 7 4</u></span> 54. Heading Angle For Other Vehicle <span style="float: right;"><u>2 5 4</u></span>	
RECONSTRUCTION DATA	
55. Towed Trailing Unit <span style="float: right;"><u>φ</u></span> (0) No towed unit (1) Yes—towed trailing unit (9) Unknown 56. Documentation of Trajectory Data for This Vehicle <span style="float: right;"><u>φ</u></span> (0) No (1) Yes 57. Post Collision Condition of Tree or Pole (For Highest Delta V) <span style="float: right;"><u>φ</u></span> (0) Not collision (for highest delta V) with tree or pole (1) Not damaged (2) Cracked/sheared (3) Tilted <45 degrees (4) Tilted ≥45 degrees (5) Uprooted tree (6) Separated pole from base (7) Pole replaced (8) Other (specify): _____ (9) Unknown	

## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

0 1 110.6 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

60. Longitudinal Component of  
Delta V+ 0 1 1 Highest10.6 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than  
-0.5 kmph and less than +0.5 kmph)

(±160) ±159.5 kmph and above

(999) Unknown

61. Lateral Component of Delta V

0 + 0 0 0 Highest

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than -0.5 kmph and  
less than +0.5 kmph)

(±160) ±159.5 kmph and above

(999) Unknown

62. Energy Absorption

0 0 7 4 0 07408.2 Nearest 100 joules (highest)

\_\_\_\_ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)

(9997) 999,650 joules or more

(9999) Unknown

63. Impact Speed

Highest

9 9 8

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(998) Trajectory algorithm not run

(999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program  
Results (For Highest Delta V)3

(0) No reconstruction

(1) Collision fits model — results appear  
reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear  
reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent  
Speed

Highest

0 1 110.78 Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? [ ] YES [ ] NO

IF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO



ESTIMATED DELTA V	VEHICLE INSPECTION
66. Estimated Highest Delta V (Researcher Determined) <span style="float: right;"><u>Ø</u></span> (0) Reconstruction Delta V coded  <i>Estimated Delta V</i> (1) Less than 10 kmph (2) ≥ 10 kmph but < 25 kmph (3) ≥ 25 kmph but < 40 kmph (4) ≥ 40 kmph but < 55 kmph (5) ≥ 55 kmph  <i>Other estimates of damage severity</i> (6) Minor (7) Moderate (8) Severe  (9) Unknown	67. Type of Vehicle Inspection <span style="float: right;"><u>2</u></span> (0) No inspection (1) Vehicle fully repaired-no damage evident (2) Partial inspection (specify): <u>PHOTOS ONLY</u> (3) Complete inspection

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67=0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
 THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
 OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



## EXTERIOR VEHICLE FORM

1. Primary Sampling Unit Number	3. Vehicle Number <u>61</u>
2. Case Number - Stratum <u>AB 22</u>	

## VEHICLE IDENTIFICATION

VIN <u>1 F A S P 1 1 J 7 S W</u>	<del>X</del> <del>X</del> <del>X</del> <del>X</del> <del>X</del> <del>X</del>	Model Year <u>95</u>
Vehicle Make (specify): <u>FORD</u>	Vehicle Model (specify): <u>ESCORT</u>	

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
1	RF BUMPER CORNER →		C-4

## CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

NTSB MEASUREMENTS

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

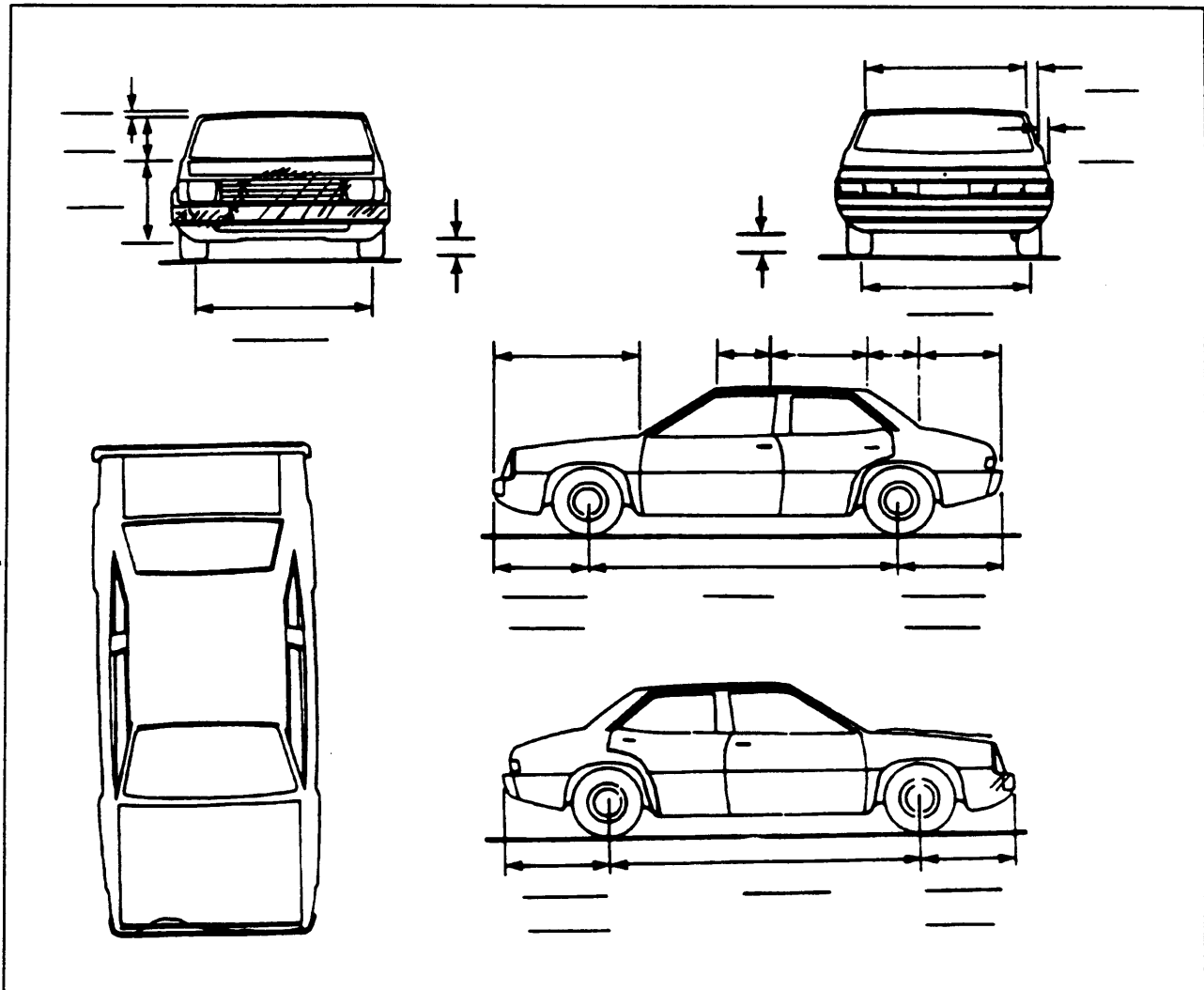
Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±D
		Width (CDC)	Max Crush								
		(INCHES)									
1	BUMPER	32	6	32	1	2	3	6	1	1	+19
		(METRIC)									
1	BUMPER	81	15	81	3	5	8	15	3	3	+48
		(INCHES)									
1	BUMPER	32	6	58	4	4	6	1			+19
		(METRIC)									
1	BUMPER	81	15	147	4	4	15	3			+48

Adjustment to use undeformed end width as a CRASH L

## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted    b. Tire deflated RF <u>2</u> RF <u>2</u> LF <u>2</u> LF <u>2</u> RR <u>2</u> RR <u>2</u> LR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>250</u> cm Overall Length <u>432</u> cm Maximum Width <u>174</u> cm Curb Weight <u>1044</u> kg Average Track <u>144</u> cm Front Overhang <u>88</u> cm Rear Overhang <u>96</u> cm Undeformed End Width <u>147</u> cm Engine Size: cyl./displ. <u>1.9 L EFI I 4</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF $\pm$ <u>—</u> ° LF $\pm$ <u>—</u> ° RR $\pm$ <u>—</u> ° LR $\pm$ <u>—</u> ° Within $\pm$ 5 degrees
<b>TYPE OF TRANSMISSION</b> <input checked="" type="checkbox"/> Manual <input type="checkbox"/> Automatic END SHIFT $\geq$ 10 CM <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD Approximate Cargo Weight <u>—</u> kg		

## MEASUREMENTS IN CENTIMETERS



**NOTES** Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

**CODES FOR OBJECT CONTACTED**

(99) Unknown event or object

30



## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>12</u>	7. <u>F</u>	8. <u>Z</u>	9. <u>E</u>	10. <u>W</u>	11. <u>01</u>

## Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>147</u>	<u>000</u>	<u>000</u>	<u>015</u>	<u>003</u>	_____	_____	<u>048</u>

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
_____	_____	_____	_____	_____	_____	_____	_____

26. Undeformed End Width  
(Coded when highest severity impact is an end plane impact.) 147  
\_\_\_\_\_ Code to the nearest centimeter  
(250) 250 centimeters or more  
(998) No highest severity end plane impact  
(999) Unknown

27. Direct Damage Width  
(For highest severity impact) 081  
\_\_\_\_\_ Code to the nearest centimeter  
(250) 250 centimeters or more  
(999) Unknown

28. Original Wheelbase  
\_\_\_\_\_ Code to the nearest centimeter 254  
(650) 650 centimeters or more  
(999) Unknown  
\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

29. Original Average Track Width  
\_\_\_\_\_ Code to the nearest centimeter 144  
(185) 185 centimeters or more  
(999) Unknown  
\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

**FUEL SYSTEM**

30. Are CDCs Documented but Not Coded on The Automated File? φ  
 (0) No  
 (1) Yes

31. Researcher's Assessment of Vehicle Disposition φ  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? φ  
 (0) No post manufacturer modifications  
 (1) Yes - post manufacturer modifications (specify): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (Include photograph of CERTIFICATION PLACARD in case report)  
 (9) Unknown if vehicle is modified

35. Location of Fuel Tank-1 Filler Cap 2  
 36. Location of Fuel Tank-2 Filler Cap φ  
 (0) No fuel tank  
 (1) On back plane  
 (2) Aft of center of the rear wheels (rear axle) on left side plane  
 (3) Aft of center of the rear wheels (rear axle) on right side plane  
 (4) Forward of center of the rear wheels (rear axle) on left side plane  
 (5) Forward of center of the rear wheels (rear axle) on right side plane  
 (6) Over the center of the rear wheels (rear axle) on left side plane  
 (7) Over the center of the rear wheels (rear axle) on right side plane  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

37. Type of Fuel Tank-1 1  
 38. Type of Fuel Tank-2 φ  
 (0) No fuel tank (electrical vehicle)  
 (1) Metallic  
 (2) Non-metallic  
 (9) Unknown

39. Location of Fuel Tank-1 4  
 40. Location of Fuel Tank-2 φ  
 (0) No fuel tank  
 (1) Aft of center of the rear wheels (rear axle) centered  
 (2) Aft of center of the rear wheels (rear axle) left side  
 (3) Aft of center of the rear wheels (rear axle) right side  
 (4) Forward of center of the rear wheels (rear axle) centered  
 (5) Forward of center of the rear wheels (rear axle) left side  
 (6) Forward of center of the rear wheels (rear axle) right side  
 (7) Over center of the rear wheels (rear axle)  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

41. Damage to Fuel Tank-1 1  
 42. Damage to Fuel Tank-2 φ  
 (0) No fuel tank  
 (1) No damage to fuel tank  
 (2) Deformed, no seam failure  
 (3) Deformed, with a seam failure  
 (4) Punctured  
 (5) Lacerated (ripped)  
 (6) Abraded (scraped)  
 (7) Filler neck separation from the fuel tank  
 (8) Other damage (specify): \_\_\_\_\_  
 (9) Unknown

**FIRE OCCURRENCE**

33. Fire Occurrence φ  
 (0) No fire  
 Yes, fire occurred  
 (1) Minor  
 (2) Major  
 (9) Unknown

34. Origin of Fire φ  
 (0) No fire  
 (1) Vehicle exterior (front, side, back, top)  
 (2) Exhaust system  
 (3) Fuel tank (and other fuel retention system parts)  
 (4) Engine compartment  
 (5) Cargo/trunk compartment  
 (6) Instrument panel  
 (7) Passenger compartment area  
 (8) Other location (specify): \_\_\_\_\_  
 (9) Unknown

<p>43. Leakage Location of Fuel System-1 <span style="float: right;"><u>1</u></span></p> <p>44. Leakage Location of Fuel System-2 <span style="float: right;"><u>Φ</u></span></p> <p>(0) No fuel tank (1) No fuel leakage</p> <p><i>Primary Area Of Leakage</i></p> <p>(2) Tank (3) Filler neck (4) Cap (5) Lines/pump/filter (6) Vent/emission recovery (8) Other (specify): _____ (9) Unknown</p> <p>45. Fuel Type-1 <span style="float: right;"><u>Φ 1</u></span></p> <p>46. Fuel Type-2 <span style="float: right;"><u>Φ Φ</u></span></p> <p><i>Single Fuel Type</i></p> <p>(00) No fuel tank (01) Gasoline (02) Diesel (03) CNG (Compressed Natural Gas) (04) LPG (Liquid Petroleum Gas) also known as Propane (05) LNG (Liquid Natural Gas) (06) Methanol (M100 or M85) (07) Ethanol (E100 or E85) (08) Other (Hydrogen or others) (specify): _____</p> <p><i>Electric Powered or Electric/Solar Powered Vehicles</i></p> <p>(10) Lead Acid Battery (11) Nickel-Iron Battery (12) Nickel-Cadmium Battery (13) Sodium Metal Chloride Battery (14) Sodium Sulfur Battery (18) Other (Specify): _____</p> <p>(98) Other Hybrid (specify): _____</p> <p>(99) Unknown fuel type</p>	<p>47. Is This Vehicle Equipped With More Than Two Fuel Tanks? <span style="float: right;"><u>Φ</u></span></p> <p>(0) No (one or two tanks only)</p> <p><i>Yes - More Than Two Tanks</i></p> <p>(1) Yes – <u>no damage</u> to any tank or filler cap and <u>no fuel system leakage</u> (2) Yes – <u>no damage</u> to any tank or filler cap but <u>there is fuel system leakage</u> (specify leakage location): _____ (3) Yes – <u>damage</u> to an additional tank or filler cap and <u>there is fuel system leakage</u> (specify the following):  Type of tank _____  Tank location _____  Filler cap location _____  Tank damage _____  Location of leakage _____  Type of fuel _____  (9) Unknown if more than two tanks</p>
<p><b>COMMENTS</b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***</p> <p>(GV10=0)</p> <p>DO NOT COMPLETE THE INTERIOR VEHICLE FORM.</p>	





## INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number \_\_\_\_\_

2. Case Number - Stratum   A     B     2     2  3. Vehicle Number   Φ     1  

## INTEGRITY

4. Passenger Compartment Integrity   Φ     9  

(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield  
(02) Door (side)  
(03) Door/hatch (back door)  
(04) Roof  
(05) Roof glass  
(06) Side window  
(07) Rear window (backlight)  
(08) Roof and roof glass  
(09) Windshield and door (side)  
(10) Windshield and roof  
(11) Side and rear window (side window and backlight)  
(12) Windshield and side window  
(13) Door and side window  
(98) Other combination of above (specify): \_\_\_\_\_

(99) Unknown

## Door, Tailgate or Hatch Opening

5. LF   1   6. RF   1   7. LR   Φ   8. RR   Φ   9. TG/H   9  

- (0) No door/gate/hatch  
(1) Door/gate/hatch remained closed and operational  
(2) Door/gate/hatch came open during collision  
(3) Door/gate/hatch jammed shut  
(8) Other (specify): \_\_\_\_\_

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch  
Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø10. LF   Φ   11. RF   Φ   12. LR   Φ   13. RR   Φ   14. TG/H   Φ  

- (0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)  
(2) Latch/striker failure due to damage  
(3) Hinge failure due to damage  
(4) Door structure failure due to damage  
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage  
(6) Latch/striker and hinge failure due to damage  
(8) Other failure (specify): \_\_\_\_\_

(9) Unknown

## GLAZING

Type of Window/Windshield Glazing

15. WS   1   16. LF   2   17. RF   2   18. LR   2   19. RR   2    
20. BL   2   21. Roof   Φ   22. Other   Φ  

- (0) No glazing  
(1) AS-1 — Laminated  
(2) AS-2 — Tempered  
(3) AS-3 — Tempered-tinted (original)  
(4) AS-2 — Tempered-with after market tint  
(5) AS-3 — Tempered-tinted (with additional after market tint)  
(6) AS-14 — Glass/Plastic  
(7) Glazing removed prior to accident  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

Window Precrash Glazing Status

23. WS   1   24. LF   9   25. RF   9   26. LR   9   27. RR   9    
28. BL   1   29. Roof   Φ   30. Other   Φ  

- (0) No glazing  
(1) Fixed  
(2) Closed  
(3) Partially opened  
(4) Fully opened  
(7) Glazing removed prior to accident  
(9) Unknown

Glazing Damage from Impact Forces

31. WS   1   32. LF   1   33. RF   1   34. LR   1   35. RR   1    
36. BL   1   37. Roof   Φ   38. Other   Φ  

- (0) No glazing  
(1) No glazing damage from impact forces  
(2) Glazing in place and cracked from impact forces  
(3) Glazing in place and holed from impact forces  
(4) Glazing out-of-place (cracked or not) and not holed from impact forces  
(5) Glazing out-of-place and holed from impact forces  
(6) Glazing disintegrated from impact forces  
(7) Glazing removed prior to accident  
(9) Unknown if damaged

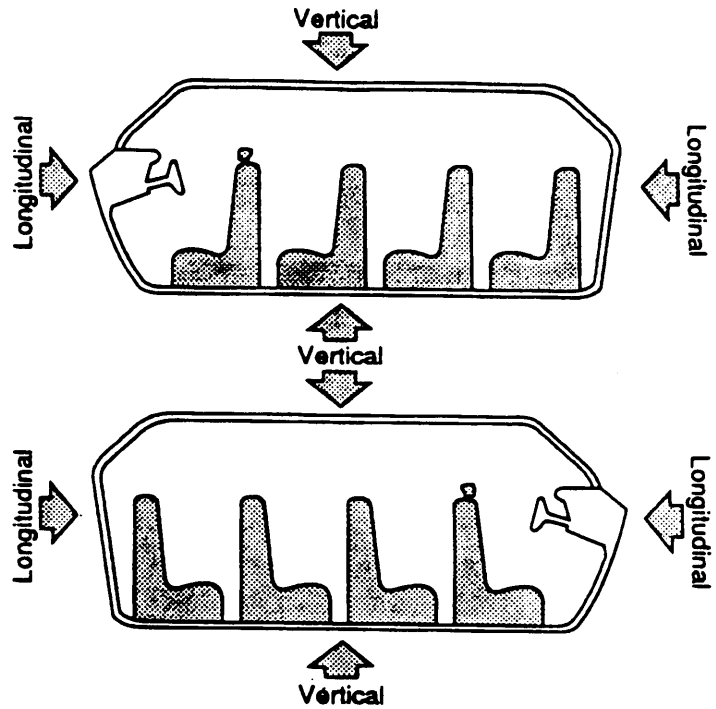
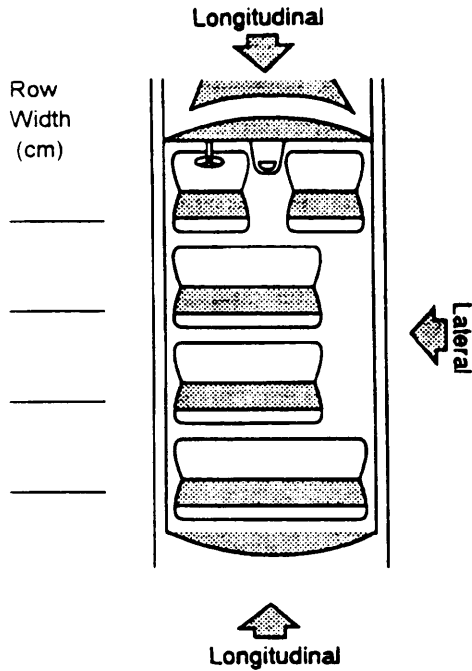
Glazing Damage from Occupant Contact

39. WS   1   40. LF   9   41. RF   9   42. LR   9   43. RR   9    
44. BL   1   45. Roof   Φ   46. Other   Φ  

- (0) No glazing  
(1) No occupant contact to glazing  
(2) Glazing contacted by occupant but no glazing damage  
(3) Glazing in place and cracked by occupant contact  
(4) Glazing in place and holed by occupant contact  
(5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact  
(6) Glazing out-of-place by occupant contact and holed by occupant contact  
(7) Glazing removed prior to accident  
(8) Glazing disintegrated by occupant contact  
(9) Unknown if contacted by occupant

# INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			INTRUSION	DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	—	INTRUDED VALUE	=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
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			—		=	
			—		=	
			—		=	
			—		=	

**OCCUPANT AREA INTRUSION**

Note: If no intrusions, leave variables IV47-IV86 blank.

**INTRUDING COMPONENT***Interior Components*

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): \_\_\_\_\_

*Exterior Components*

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

**LOCATION OF INTRUSION****Front Seat**

- (11) Left
- (12) Middle
- (13) Right

**Second Seat**

- (21) Left
- (22) Middle
- (23) Right

**Third Seat**

- (31) Left
- (32) Middle
- (33) Right

**Fourth Seat**

- (41) Left
- (42) Middle
- (43) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) \_\_\_\_\_

- (99) Unknown

**MAGNITUDE OF INTRUSION**

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

**DOMINANT CRUSH DIRECTION**

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown



## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

## STEERING COLUMN

87. Steering Column Type 2

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

88. Tilt Steering Column Adjustment 9

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

89. Telescoping Steering Column Adjustment 0

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

90. Steering Rim/Spoke Deformation 0 0

- \_\_\_\_\_ Code actual measured deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation 0 0

- (00) No steering rim deformation

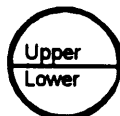
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

## INSTRUMENT PANEL

92. Odometer Reading 4 4 1,000

- \_\_\_\_\_ kilometers  
 Code to the nearest 1,000 kilometers  
 (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown  
 \_\_\_\_\_ 385 miles X 1.6093 = \_\_\_\_\_ 619 kilometers

Source: \_\_\_\_\_

93. Instrument Panel Damage from Occupant Contact? 0

- (0) No  
 (1) Yes  
 (9) Unknown

94. Type of Knee Bolster Covering 9

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 1

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? 1

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

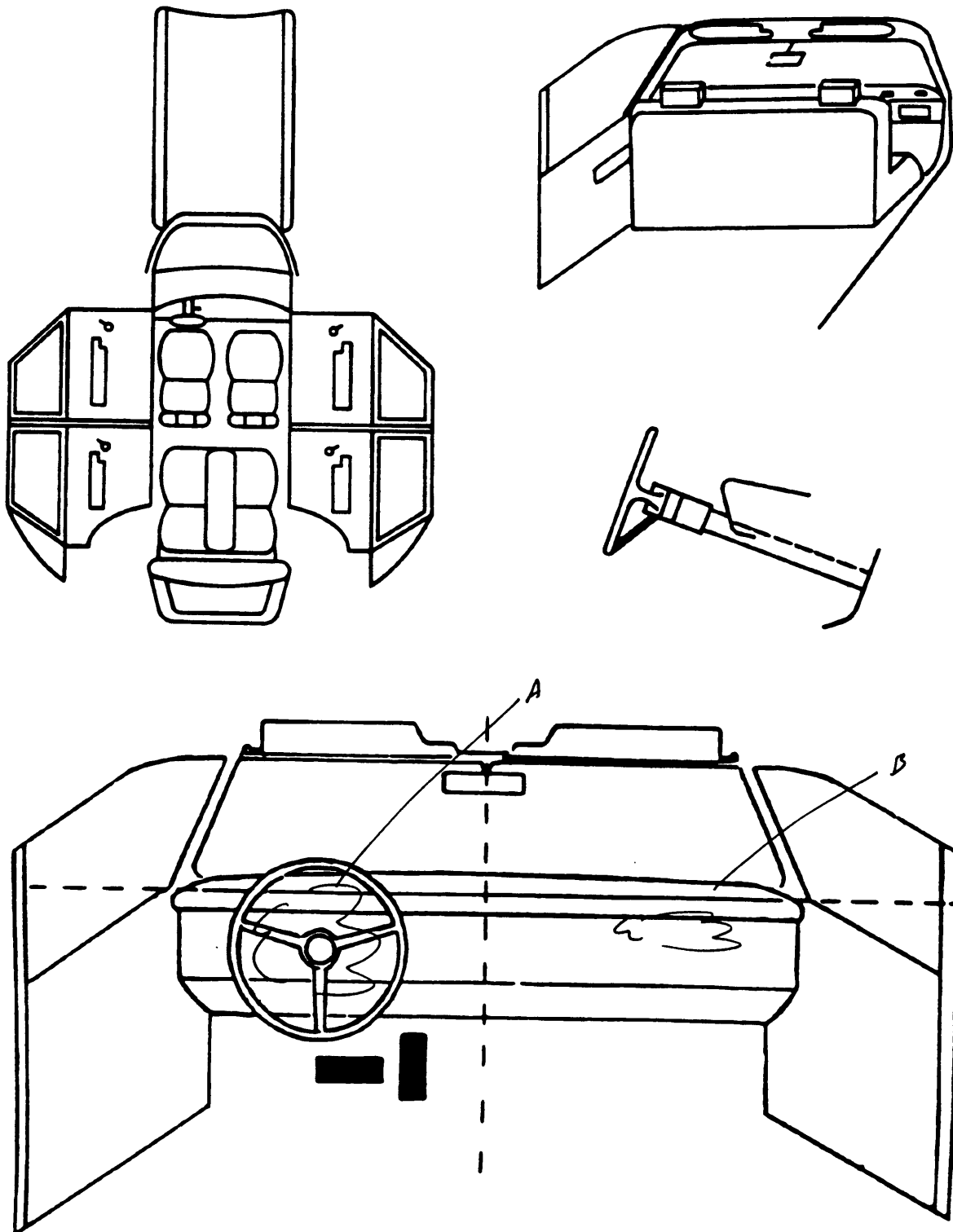
97. Adaptive (Assistive) Driving Equipment 0

- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed (Check all that apply.)  
☐ Hand controls for braking/acceleration  
☐ Steering control devices (attached to OEM steering wheel)  
☐ Steering knob attached to steering wheel  
☐ Low effort power steering (unit or device)  
☐ Replacement steering wheel (i.e., reduced diameter)  
☐ Joy-stick steering controls  
☐ Wheelchair tie-downs  
☐ Modification to seat belts (specify): \_\_\_\_\_  
☐ Additional or relocated switches (specify): \_\_\_\_\_  
☐ Raised roof  
☐ Wall-mounted head rest (used behind wheelchair)  
☐ Other adaptive device (specify): \_\_\_\_\_

(9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	174	91	ARMS	DEPLOYED	2
B	189	62	-	-	3
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tapedeck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## CODES FOR INTERIOR COMPONENTS

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify)  
 (195) Other air bag compartment cover (specify)

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown



# MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	/	4
	Evidence of usage	-		-
	Used in this crash?	YES		YES
	Proper Use	1		7
	Failure Modes	1		1
	Anchorage Adjustment	1		1
SECOND	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

## Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

## Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):

(9) Unknown

## Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

### Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

**AUTOMATIC RESTRAINTS**

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

**AIR BAGS**

		Left Front	Right Front	Other
F I R S T	Availability/Function	/	/	0
	Deployment	/	/	0
	Failure	/	/	0

<b>Air Bag System Availability/Function</b> (0) Not equipped/not available (1) Air bag  <i>Non-functional</i> (2) Air bag disconnected (specify): _____ (3) Air bag not reinstalled (9) Unknown	<b>Frontal Air Bag System Deployment (This Occupant Position)</b> (0) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, accident sequence undetermined (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown	<b>Air Bag(s) Deployment, <u>Other</u> Than First Seat Frontal (This Occupant Position)</b> (0) Not equipped with an <u>"other"</u> air bag (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown
--	--	--

<b>Are There Indications of Air Bag System Failure? (This Occupant Position)</b> (0) Not equipped/not available (1) No (2) Yes (specify): _____ (9) Unknown
---

**AUTOMATIC BELTS**

		Left	Right
F I R S T	Availability/Function	/	/
	Use	/	/
	Type	2	2
	Proper Use	1	7
	Failure Modes	1	1

<b>Automatic (Passive) Belt System Availability/Function</b> (0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown  <i>Non-functional</i> (4) Automatic belts destroyed or rendered inoperative (9) Unknown	<b>Proper Use of Automatic (Passive) Belt System</b> (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat  <i>Automatic Belt Used Improperly</i> (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____ (8) Other improper use of automatic belt system (specify): _____ (9) Unknown	<b>Automatic (Passive) Belt Failure Modes During Accident</b> (0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): _____ (6) Broken retractor (7) Combination of above (specify): _____ (8) Other automatic belt failure (specify): _____ (9) Unknown
---	--	--

<b>Automatic (Passive) Belt System Use</b> (0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (3) Automatic belt use unknown (9) Unknown	<b>Automatic (Passive) Belt System Type</b> (0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown
--	--

# FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data **for the driver and first seat passenger** in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?	1	1
Flaps open at tear points?	2	2
Flaps damaged?	1	1
Air bag damaged?	01	01
Source of air bag damage	01	01
Air bag tethered?	2/UNK.	1
Air bag have vent ports?	2	2
Other occupant contact air bag?	1	1
Occupant wearing eyewear?	9	1

## Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):

- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):

- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

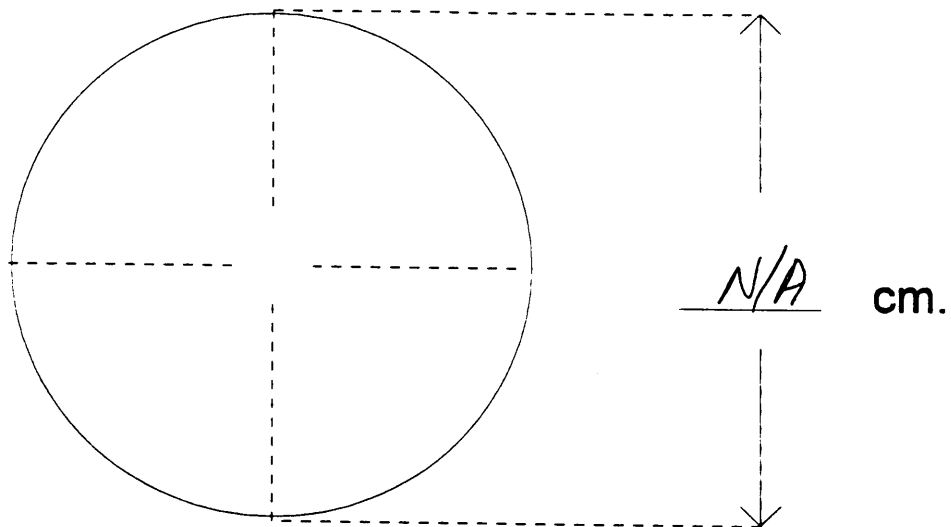
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was This Occupant Wearing Eye-wear?

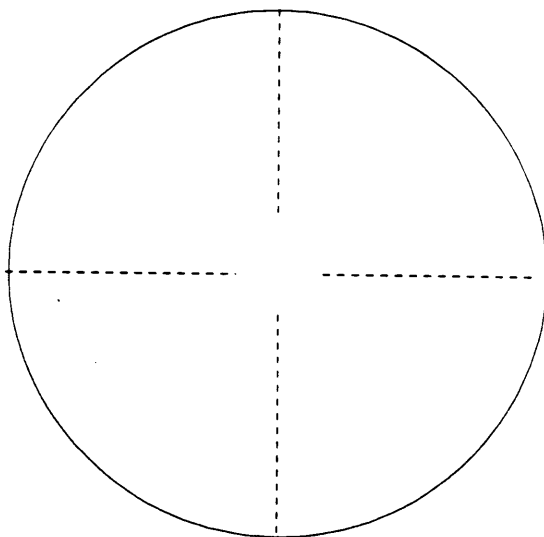
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)





# DRIVER AIR BAG SKETCHES (Cont'd)

## 3. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

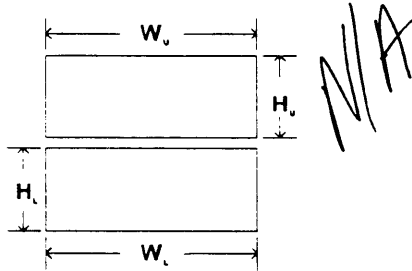
b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

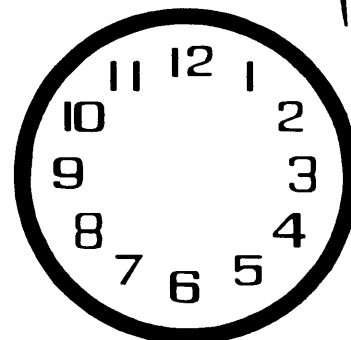
height ( $H_L$ ) \_\_\_\_\_



## 4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

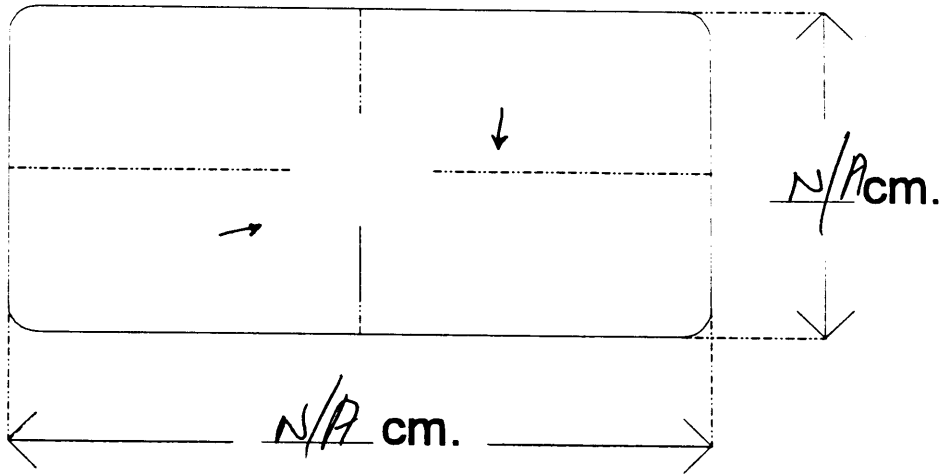
## 5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

## 6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

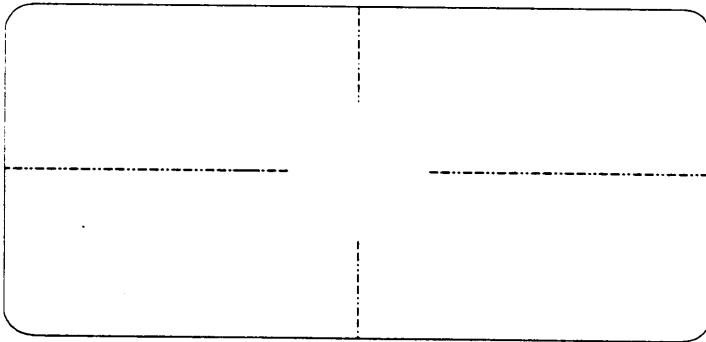


## PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



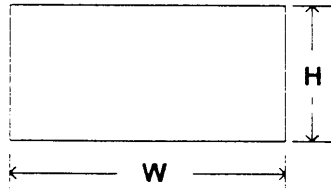
# PASSENGER AIR BAG SKETCHES (Cont'd)

## 3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

a. Flap

width (W) 12.5 in.

height (H) 6.5 in.



## 4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

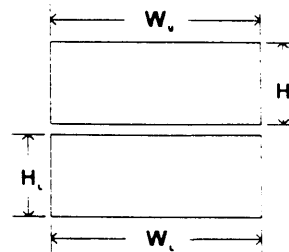
b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

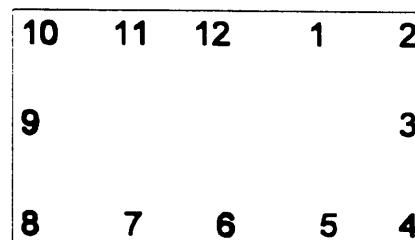
height ( $H_L$ ) \_\_\_\_\_



## 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

## 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

## 7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)



## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	/	3
	Seat Type	02		02
	Seat Performance	1		1
	Seat Orientation	1		1
	Seat Track Position	9		9
	Seat Back Incline Pre/Post Impact	99		99
SECOND	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

## HEAD RESTRAINTS/SEAT EVALUATION

**Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other
- Specify: \_\_\_\_\_
- (9) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable
- Upright prior to impact*
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position
- Slightly reclined prior to impact*
- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Orientation (this Occupant Position)**

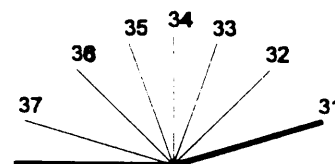
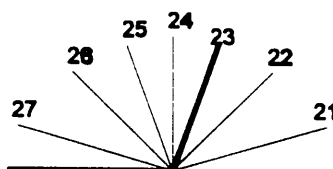
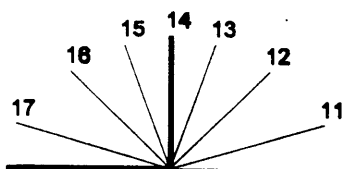
- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track
- Adjustable Seat Track*
- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

*Completely reclined prior to impact*

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown



Coding diagrams for Seat Back Incline Position Prior and Post Impact

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number	42					
1. Type of Child Safety Seat	1					
2. Child Safety Seat Orientation	41					
3. Child Safety Seat Harness Usage	43					
4. Child Safety Seat Shield Usage	43					
5. Child Safety Seat Tether Usage	43					
6. Child Safety Seat Make/Model	CENTURY 565	Specify Below for Each Child Safety Seat				

**1. Type of Child Safety Seat**

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

**2. Child Safety Seat Orientation**

- (00) No child safety seat

Designed for Rear Facing for This Age/Weight

- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

**3. Child Safety Seat Harness Usage**

**4. Child Safety Seat Shield Usage**

**5. Child Safety Seat Tether Usage**

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

**6. Child Safety Seat Make/Model**

(Specify make/model and occupant number)

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**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No [☒] Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

---



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---



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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

- (9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

- (9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No [☒] Yes [ ]

Describe entrapment mechanism: \_\_\_\_\_

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Component(s): \_\_\_\_\_

(Note in vehicle interior diagram)



National Highway Traffic Safety  
AdministrationNATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number \_\_\_\_\_

2. Case Number - Stratum AB 2 23. Vehicle Number φ 14. Occupant Number φ 1

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age \_\_\_\_\_

Code actual age at time of accident.

(00) Less than one year old (specify by month): \_\_\_\_\_

(97) 97 years and older \_\_\_\_\_

(99) Unknown \_\_\_\_\_

6. Occupant's Sex 2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height 1 6 φCode actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight 0 8 2Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role 1

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position 1 1

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture φ

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

## EJECTION/ENTRAPMENT

## 12. Ejection

0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

## 13. Ejection Area

0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

## 14. Ejection Medium

0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

## 15. Medium Status (Immediately Prior To Impact)

0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

## 16. Entrapment

0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_

\_\_\_\_\_  
(9) Unknown

## 17. Occupant Mobility

4

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 4

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
 [ ] Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [✓] Other (specify):

PAK

[ ] Unknown if belt used

## AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function 1

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function 1

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) φ

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? 1

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 99

(00) Occupant not seated or no seat

(01) Not adjustable

*Upright prior to impact*

(11) Moved to completely rearward position

(12) Moved to rearward midrange position

(13) Moved to slightly rearward position

(14) Retained pre-impact position

(15) Moved to slightly forward position

(16) Moved to forward midrange position

(17) Moved to completely forward position

*Slightly reclined prior to impact*

(21) Moved to completely rearward position

(22) Moved to rearward midrange position

(23) Retained pre-impact position

(24) Moved to upright position

(25) Moved to slightly forward position

(26) Moved to forward midrange position

(27) Moved to completely forward position

*Completely reclined prior to impact*

(31) Retained pre-impact position

(32) Moved to rearward midrange position

(33) Moved to slightly rearward position

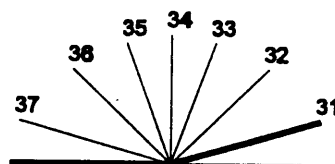
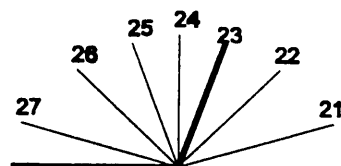
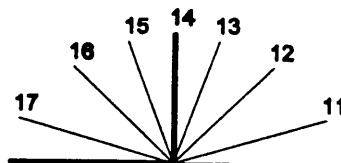
(34) Moved to upright position

(35) Moved to slightly forward position

(36) Moved to forward midrange position

(37) Moved to completely forward position

(99) Unknown

54. Seat Performance (this Occupant Position) 1

(0) Occupant not seated or no seat

(1) No seat performance failure(s)

(2) Seat adjusters failed

(3) Seat back folding locks or "seat back" failed  
(specify): \_\_\_\_\_

(4) Seat track/anchors failed

(5) Deformed by impact of occupant

(6) Deformed by passenger compartment intrusion,  
(specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model φ φ φ  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):

\_\_\_\_\_  
 (998) Unknown make/model  
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat φ  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat - with shield  
 (5) Booster seat - without shield  
 (7) Other type child safety seat (specify):  
 \_\_\_\_\_  
 (8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation φ φ  
 (00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):

\_\_\_\_\_  
 (09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):

\_\_\_\_\_  
 (19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):

\_\_\_\_\_  
 (29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage φ φ

59. Child Safety Seat Shield Usage φ φ

60. Child Safety Seat Tether Usage φ φ

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used  
 (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market  
 harness/shield/tether added  
 (09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used



**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)**0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality**9

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

**Nonfatal**

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)**7

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

**64. Hospital Stay**0 0

- (00) Not Hospitalized  
\_\_\_\_\_ Code the number of days (up through 60)  
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost**9 9

- \_\_\_\_\_ Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**

## 66. Time to Death

4 4

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

## 67. 1st Medically Reported Cause of Death

4 4

## 68. 2nd Medically Reported Cause of Death

4 4

## 69. 3rd Medically Reported Cause of Death

4 4

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
\_\_\_\_\_

- (97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

- (99) Unknown

## 70. Number of Recorded Injuries for This Occupant

4 3

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA**

## 71. Glasgow Coma Scale (GCS) Score (at Medical Facility)

9 7

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

## 72. Was the Occupant Given Blood?

9

- (1) No - blood not given  
(2) Yes - blood given  
(specify units): \_\_\_\_\_  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub>9 7

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

## 74. Primary Source of Belt Use Determination

8

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown if belt used



U.S. Department of Transportation

National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number 012. Case Number - Stratum AB 224. Occupant Number 01

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90		Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
				Specific Anatomic Structure								
1st	5. <u>7</u>	6. <u>7</u>	7. <u>9</u>	8. <u>04</u>	9. <u>02</u>	10. <u>1</u>	11. <u>2</u>	12. <u>170</u>	13. <u>2</u>	14. <u>1</u>	15. <u>00</u>	
2nd	16. <u>7</u>	17. <u>7</u>	18. <u>9</u>	19. <u>04</u>	20. <u>02</u>	21. <u>1</u>	22. <u>1</u>	23. <u>170</u>	24. <u>2</u>	25. <u>1</u>	26. <u>00</u>	
3rd	27. <u>7</u>	28. <u>5</u>	29. <u>9</u>	30. <u>04</u>	31. <u>02</u>	32. <u>1</u>	33. <u>9</u>	34. <u>152</u>	35. <u>3</u>	36. <u>1</u>	37. <u>00</u>	
4th	38. _____	39. _____	40. _____	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____	47. _____	48. _____	
5th	49. _____	50. _____	51. _____	52. _____	53. _____	54. _____	55. _____	56. _____	57. _____	58. _____	59. _____	
6th	60. _____	61. _____	62. _____	63. _____	64. _____	65. _____	66. _____	67. _____	68. _____	69. _____	70. _____	
7th	71. _____	72. _____	73. _____	74. _____	75. _____	76. _____	77. _____	78. _____	79. _____	80. _____	81. _____	
8th	82. _____	83. _____	84. _____	85. _____	86. _____	87. _____	88. _____	89. _____	90. _____	91. _____	92. _____	
9th	93. _____	94. _____	95. _____	96. _____	97. _____	98. _____	99. _____	100. _____	101. _____	102. _____	103. _____	
10th	104. _____	105. _____	106. _____	107. _____	108. _____	109. _____	110. _____	111. _____	112. _____	113. _____	114. _____	

## OCCUPANT INJURY DATA

Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
11th	—	—	—	—	—	—	—	—	—	—
12th	—	—	—	—	—	—	—	—	—	—
13th	—	—	—	—	—	—	—	—	—	—
14th	—	—	—	—	—	—	—	—	—	—
15th	—	—	—	—	—	—	—	—	—	—
16th	—	—	—	—	—	—	—	—	—	—
17th	—	—	—	—	—	—	—	—	—	—
18th	—	—	—	—	—	—	—	—	—	—
19th	—	—	—	—	—	—	—	—	—	—
20th	—	—	—	—	—	—	—	—	—	—
21st	—	—	—	—	—	—	—	—	—	—
22nd	—	—	—	—	—	—	—	—	—	—
23rd	—	—	—	—	—	—	—	—	—	—
24th	—	—	—	—	—	—	—	—	—	—
25th	—	—	—	—	—	—	—	—	—	—

## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>	To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen	The exceptions to this rule apply to:		(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
<b>Type of Anatomic Structure</b>	<u>Whole Area</u>	<b>Abbreviated Injury Scale</b>	
(1) Whole Area	(02) Skin - Abrasion	(1) Minor Injury	
(2) Vessels	(04) Skin - Contusion	(2) Moderate Injury	
(3) Nerves	(06) Skin - Laceration	(3) Serious Injury	
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion	(4) Severe Injury	
(5) Skeletal (includes joints)	(10) Amputation	(5) Critical Injury	
(6) Head - LOC	(20) Burn	(6) Maximum (untreatable)	
(9) Skin	(30) Crush	(7) Injured, unknown severity	
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

## SOURCE OF INJURY DATA

## INJURY SOURCE

## DIRECT/INDIRECT INJURY

## CONFIDENCE LEVEL

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

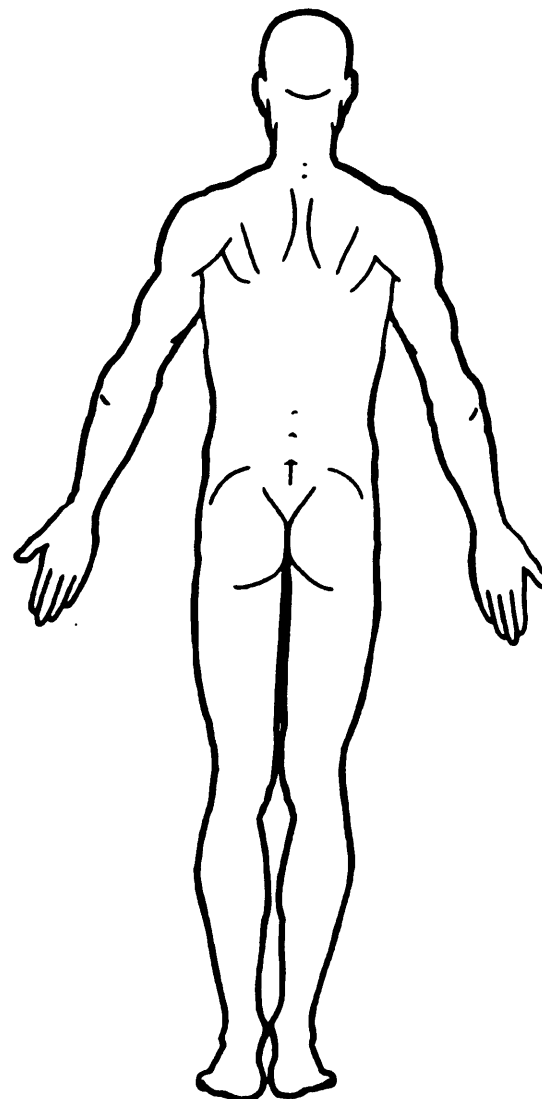
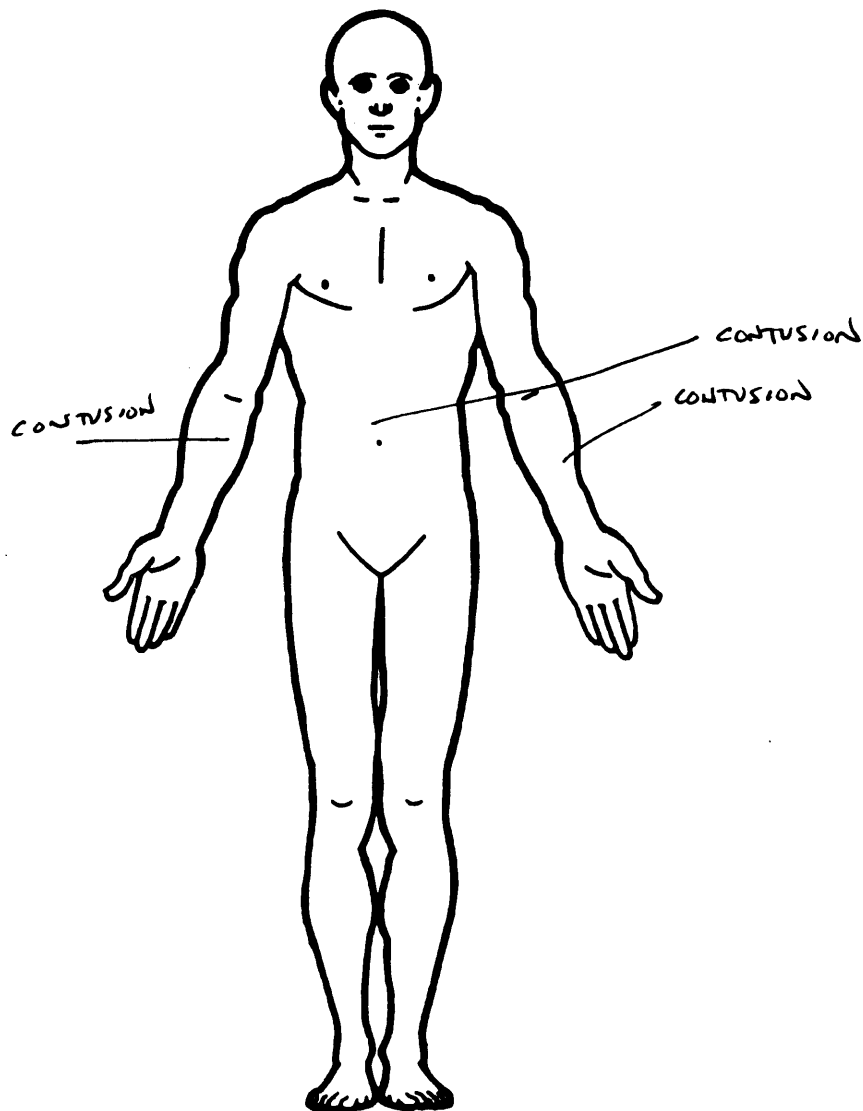


## INJURY SOURCES

<b>FRONT</b>		(102) Right side hardware or armrest	(183) Air bag-passenger side and object held	(411) Wall mounted head rest (used behind wheel chair)
(001) Windshield		(103) Right A (A1/A2)-pillar	(184) Air bag-passenger side and object in mouth	(412) Other adaptive device (specify): _____
(002) Mirror		(104) Right B-pillar	(185) Air bag compartment cover-passenger side	
(003) Sunvisor		(105) Other right pillar (specify): _____	(186) Air bag compartment cover-passenger side and eyewear	<b>EXTERIOR of OCCUPANT'S VEHICLE</b>
(004) Steering wheel rim		(106) Right side window glass	(187) Air bag compartment cover-passenger side and jewelry	(451) Hood
(005) Steering wheel hub/spoke		(107) Right side window frame	(188) Air bag compartment cover-passenger side and object held	(452) Outside hardware (e.g., outside mirror, antenna)
(006) Steering wheel (combination of codes 004 and 005)		(108) Right side window sill	(189) Air bag compartment cover-passenger side and object in mouth	(453) Other exterior surface or tires (specify): _____
(007) Steering column, transmission selector lever, other attachment		(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.	(190) Other air bag (specify) _____	(454) Unknown exterior objects
(008) Cellular telephone or CB radio		(110) Other right side object (specify): _____	(195) Other air bag compartment cover (specify) _____	
(009) Add on equipment (e.g., tape deck, air conditioner)				<b>EXTERIOR OF OTHER MOTOR VEHICLE</b>
(010) Left instrument panel and below		<b>INTERIOR</b>		(501) Front bumper
(011) Center instrument panel and below		(151) Seat, back support		(502) Hood edge
(012) Right instrument panel and below		(152) Belt restraint webbing/buckle		(503) Other front of vehicle (specify): _____
(013) Glove compartment door		(153) Belt restraint B-pillar or door frame attachment point		
(014) Knee bolster		(154) Other restraint system component (specify): _____	<b>ROOF</b>	(504) Hood
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)		(155) Head restraint system	(201) Front header	(505) Hood ornament
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)		(160) Other occupants (specify): _____	(202) Rear header	(506) Windshield, roof rail, A-pillar
(017) Windshield reinforced by exterior object (specify) _____		(161) Interior loose objects	(203) Roof left side rail	(507) Side surface
		(162) Child safety seat (specify): _____	(204) Roof right side rail	(508) Side mirrors
		(163) Other interior object (specify): _____	(205) Roof or convertible top	(509) Other side protrusions (specify): _____
(019) Other front object (specify): _____				
		<b>AIR BAG</b>	<b>FLOOR</b>	(510) Rear surface
<b>LEFT SIDE</b>		(170) Air bag-driver side	(251) Floor (including toe pan)	(511) Undercarriage
(051) Left side interior surface, excluding hardware or armrests		(171) Air bag-driver side and eyewear	(252) Floor or console mounted transmission lever, including console	(512) Tires and wheels
(052) Left side hardware or armrest		(172) Air bag-driver side and jewelry	(253) Parking brake handle	(513) Other exterior of other motor vehicle (specify): _____
(053) Left A (A1/A2)-pillar		(173) Air bag-driver side and object held	(254) Foot controls including parking brake	
(054) Left B-pillar		(174) Air bag-driver side and object in mouth		(514) Unknown exterior of other motor vehicle
(055) Other left pillar (specify): _____		(175) Air bag compartment cover-driver side	<b>REAR</b>	
		(176) Air bag compartment cover-driver side and eyewear	(301) Backlight (rear window)	<b>OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT</b>
(056) Left side window glass		(177) Air bag compartment cover-driver side and jewelry	(302) Backlight storage rack, door, etc.	(551) Ground
(057) Left side window frame		(178) Air bag compartment cover-driver side and object held	(303) Other rear object (specify): _____	(598) Other vehicle or object (specify): _____
(058) Left side window sill		(179) Air bag compartment cover-driver side and object in mouth		(599) Unknown vehicle or object
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.		(180) Air bag-passenger side	<b>ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT</b>	
(060) Other left side object (specify): _____		(181) Air bag-passenger side and eyewear	(401) Hand controls for braking/acceleration	<b>NONCONTACT INJURY</b>
		(182) Air bag-passenger side and jewelry	(402) Steering control devices (attached to OEM steering wheel)	(601) Fire in vehicle
<b>RIGHT SIDE</b>			(403) Steering knob attached to steering wheel	(602) Flying glass
(101) Right side interior surface, excluding hardware or armrests			(405) Replacement steering wheel (i.e., reduced diameter)	(603) Other noncontact injury source (specify): _____
			(406) Joy stick steering controls	(604) Air bag exhaust gases
			(407) Wheelchair tie-downs	(697) Injured, unknown source
			(408) Modification to seat belts, (specify): _____	
			(409) Additional or relocated switches, (specify): _____	
			(410) Raised roof	

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_

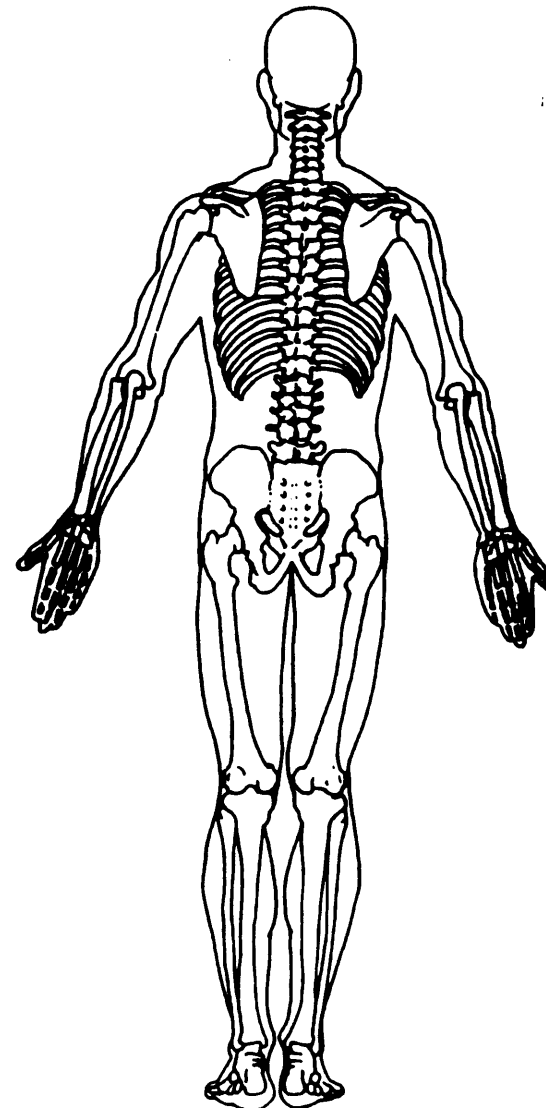
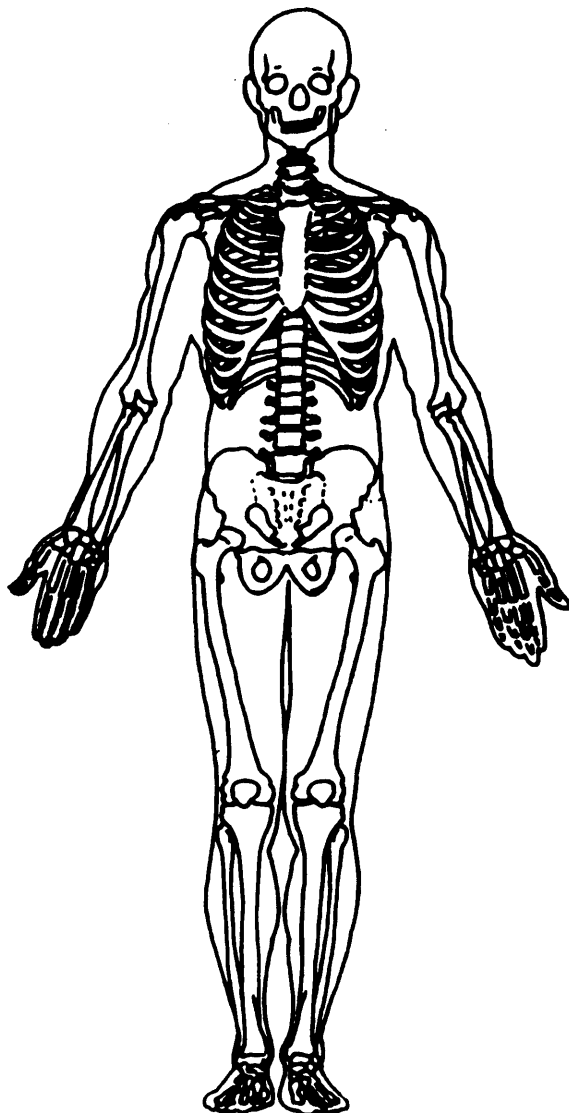
Arterial Blood Gases

pH = \_\_\_\_

PO<sub>2</sub> = \_\_\_\_

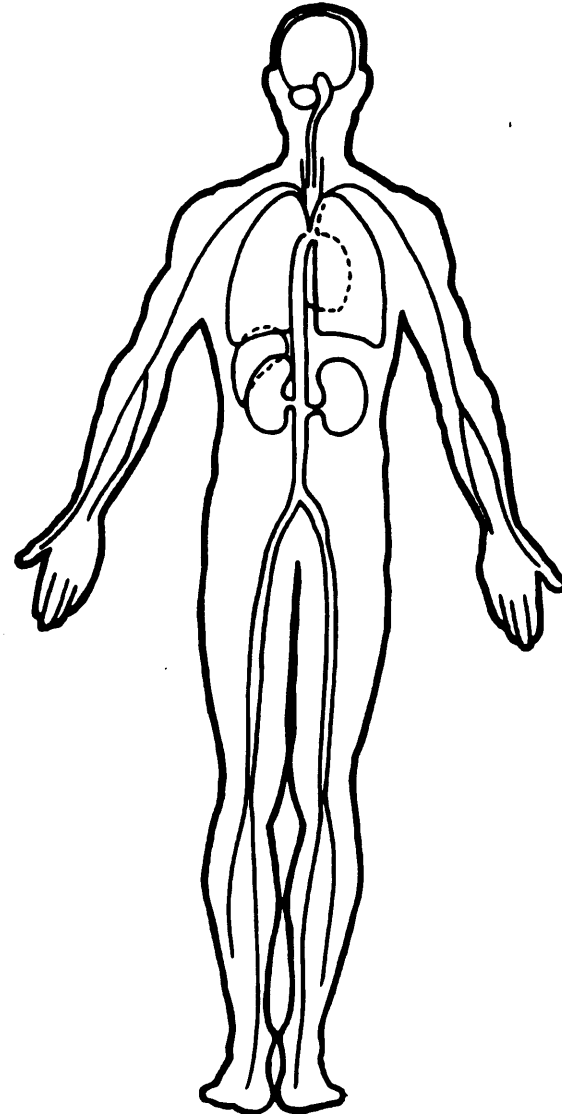
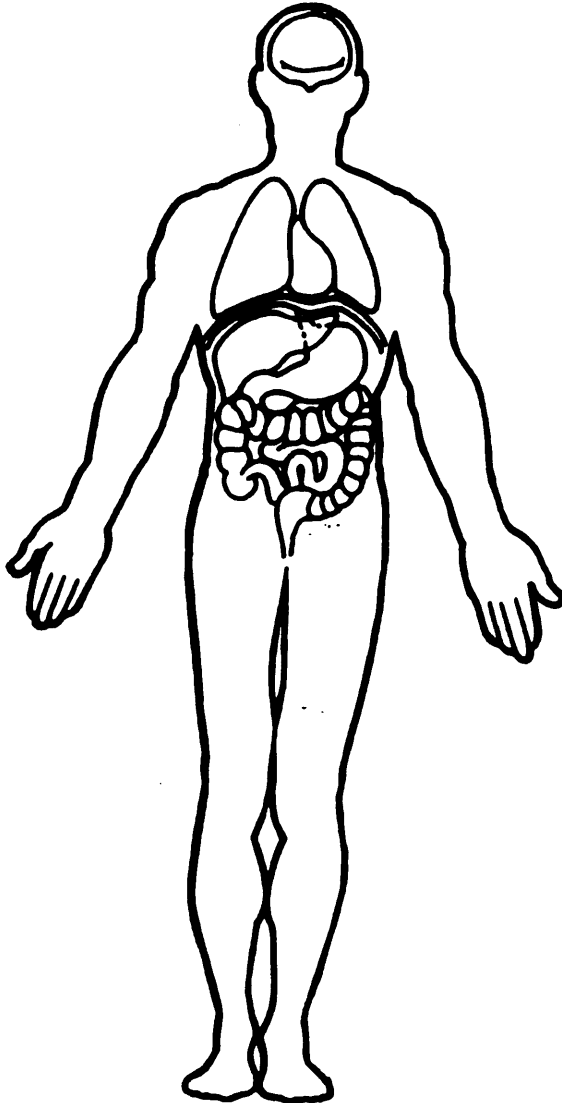
PCO<sub>2</sub> \_\_\_\_

HCO<sub>3</sub> \_\_\_\_



## OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



National Highway Traffic Safety  
Administration

BEST AVAILABLE COPY

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

\_\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify):

SUPINE IN CAR SEAT

(9) Unknown



## EJECTION/ENTRAPMENT

## 12. Ejection

φ

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

## 15. Medium Status (Immediately Prior To Impact)

φ

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

## 13. Ejection Area

φ

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

## 16. Entrapment

φ

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_

---

(9) Unknown

## 17. Occupant Mobility

2

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## 14. Ejection Medium

φ

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_

---

(5) Integral structure

(8) Other medium (specify): \_\_\_\_\_

---

(9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 3

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 13

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 1

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 2

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 1

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 2

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 7

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Wrong belt use and no locking clip
- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident ✓

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):

(9) Unknown

## POLICE REPORTED RESTRAINT USE

## AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 6

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
 [ ] Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [X] Other (specify):

PAR

[ ] Unknown if belt used

30. Frontal Air Bag System Availability/Function 1

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function 0

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? 1

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
\_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 0 1

- (00) Not equipped/not available  
\_\_\_\_\_  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
\_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 2 0 1 1

(-000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

- (-996) Deployment, unknown longitudinal Delta V  
(-997) Not deployed  
(-998) Unknown if deployed  
(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 0 1

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
\_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

## HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage φ 1  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 \_\_\_\_\_  
 (03) Object carried by occupant, (specify):  
 \_\_\_\_\_  
 (04) Adaptive/assistive controls, (specify):  
 \_\_\_\_\_  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 \_\_\_\_\_  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 \_\_\_\_\_  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 \_\_\_\_\_  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 \_\_\_\_\_  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) φ 2  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 \_\_\_\_\_  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 9  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

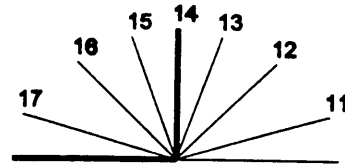


HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 99

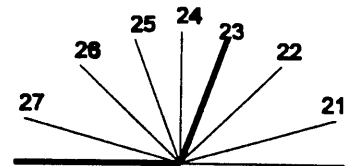
- (00) Occupant not seated or no seat  
(01) Not adjustable

*Upright prior to impact*

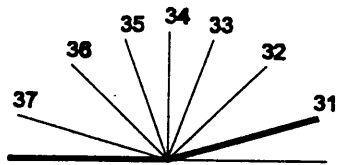
- (11) Moved to completely rearward position  
(12) Moved to rearward midrange position  
(13) Moved to slightly rearward position  
(14) Retained pre-impact position  
(15) Moved to slightly forward position  
(16) Moved to forward midrange position  
(17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
(22) Moved to rearward midrange position  
(23) Retained pre-impact position  
(24) Moved to upright position  
(25) Moved to slightly forward position  
(26) Moved to forward midrange position  
(27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
(32) Moved to rearward midrange position  
(33) Moved to slightly rearward position  
(34) Moved to upright position  
(35) Moved to slightly forward position  
(36) Moved to forward midrange position  
(37) Moved to completely forward position  
(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
(1) No seat performance failure(s)  
(2) Seat adjusters failed  
(3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
(4) Seat track/anchors failed  
(5) Deformed by impact of occupant  
(6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 1 0 2

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 1

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 0 1

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 1 159. Child Safety Seat Shield Usage 0 360. Child Safety Seat Tether Usage 0 3Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

64. Hospital Stay 01

- (00) Not Hospitalized  
\_\_\_\_\_ Code the number of days (up through 60)  
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 71

- \_\_\_\_\_ Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**

66. Time to Death

0 0

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death

0 0

68. 2nd Medically Reported Cause of Death

0 0

69. 3rd Medically Reported Cause of Death

0 0

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant

0 1

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA**

71. Glasgow Coma Scale (GCS) Score (at Medical Facility)

9 7

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood?

1

- (1) No - blood not given  
(2) Yes - blood given (specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub>0 1

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination

8

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used



U.S. Department of Transportation

National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved

O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90			Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number		
			Specific Anatomic Structure	Level of Injury	A.I.S. Severity						
1st	5. <u>2</u>	6. <u>1</u>	7. <u>5</u>	8. <u>04</u>	9. <u>04</u>	10. <u>2</u>	11. <u>2</u>	12. <u>162</u>	13. <u>2</u>	14. <u>1</u>	15. <u>44</u>
2nd	16. ____	17. ____	18. ____	19. ____	20. ____	21. ____	22. ____	23. ____	24. ____	25. ____	26. ____
3rd	27. ____	28. ____	29. ____	30. ____	31. ____	32. ____	33. ____	34. ____	35. ____	36. ____	37. ____
4th	38. ____	39. ____	40. ____	41. ____	42. ____	43. ____	44. ____	45. ____	46. ____	47. ____	48. ____
5th	49. ____	50. ____	51. ____	52. ____	53. ____	54. ____	55. ____	56. ____	57. ____	58. ____	59. ____
6th	60. ____	61. ____	62. ____	63. ____	64. ____	65. ____	66. ____	67. ____	68. ____	69. ____	70. ____
7th	71. ____	72. ____	73. ____	74. ____	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____
8th	82. ____	83. ____	84. ____	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____
9th	93. ____	94. ____	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____
10th	104. ____	105. ____	106. ____	107. ____	108. ____	109. ____	110. ____	111. ____	112. ____	113. ____	114. ____

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## OCCUPANT INJURY DATA

Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
11th	---	---	---	---	---	---	---	---	---	---
12th	---	---	---	---	---	---	---	---	---	---
13th	---	---	---	---	---	---	---	---	---	---
14th	---	---	---	---	---	---	---	---	---	---
15th	---	---	---	---	---	---	---	---	---	---
16th	---	---	---	---	---	---	---	---	---	---
17th	---	---	---	---	---	---	---	---	---	---
18th	---	---	---	---	---	---	---	---	---	---
19th	---	---	---	---	---	---	---	---	---	---
20th	---	---	---	---	---	---	---	---	---	---
21st	---	---	---	---	---	---	---	---	---	---
22nd	---	---	---	---	---	---	---	---	---	---
23rd	---	---	---	---	---	---	---	---	---	---
24th	---	---	---	---	---	---	---	---	---	---
25th	---	---	---	---	---	---	---	---	---	---

## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck			(3) Bilateral
(4) Thorax	<u>Vessels, Nerves, Organs.</u>		(4) Central
(5) Abdomen	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(5) Anterior
(6) Spine		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity	The exceptions to this rule apply to:		(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
<b>Type of Anatomic Structure</b>	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
		<b>Abbreviated Injury Scale</b>	
		(1) Minor Injury	
		(2) Moderate Injury	
		(3) Serious Injury	
		(4) Severe Injury	
		(5) Critical Injury	
		(6) Maximum (untreatable)	
		(7) Injured, unknown severity	

## SOURCE OF INJURY DATA

## INJURY SOURCE

## DIRECT/INDIRECT INJURY

## CONFIDENCE LEVEL

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police \_\_\_\_\_

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

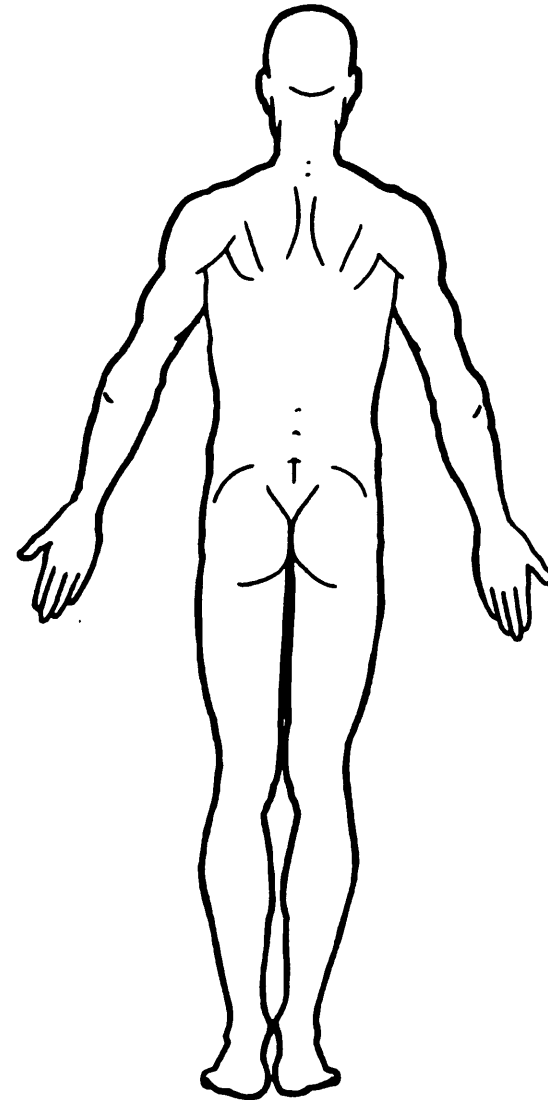
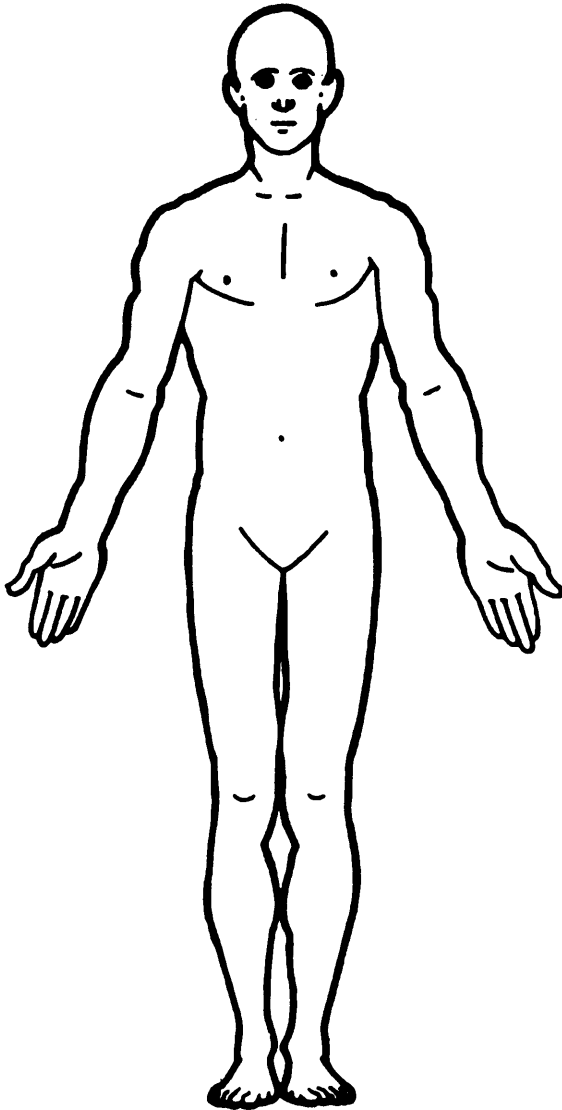
- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## INJURY SOURCES

<b>FRONT</b>		(102) Right side hardware or armrest	(183) Air bag-passenger side and object held	(411) Wall mounted head rest (used behind wheel chair)
(001) Windshield		(103) Right A (A1/A2)-pillar	(184) Air bag-passenger side and object in mouth	(412) Other adaptive device (specify): _____
(002) Mirror		(104) Right B-pillar	(185) Air bag compartment cover-passenger side	
(003) Sunvisor		(105) Other right pillar (specify): _____	(186) Air bag compartment cover-passenger side and eyewear	<b>EXTERIOR of OCCUPANT'S VEHICLE</b>
(004) Steering wheel rim		(106) Right side window glass	(187) Air bag compartment cover-passenger side and jewelry	(451) Hood
(005) Steering wheel hub/spoke		(107) Right side window frame	(188) Air bag compartment cover-passenger side and object held	(452) Outside hardware (e.g., outside mirror, antenna)
(006) Steering wheel (combination of codes 004 and 005)		(108) Right side window sill	(189) Air bag compartment cover-passenger side and object in mouth	(453) Other exterior surface or tires (specify): _____
(007) Steering column, transmission selector lever, other attachment		(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.	(190) Other air bag (specify) _____	(454) Unknown exterior objects
(008) Cellular telephone or CB radio		(110) Other right side object (specify): _____	(195) Other air bag compartment cover (specify) _____	
(009) Add on equipment (e.g., tape deck, air conditioner)				<b>EXTERIOR OF OTHER MOTOR VEHICLE</b>
(010) Left instrument panel and below		<b>INTERIOR</b>		(501) Front bumper
(011) Center instrument panel and below		(151) Seat, back support		(502) Hood edge
(012) Right instrument panel and below		(152) Belt restraint webbing/buckle		(503) Other front of vehicle (specify): _____
(013) Glove compartment door		(153) Belt restraint B-pillar or door frame attachment point		
(014) Knee bolster		(154) Other restraint system component (specify): _____	<b>ROOF</b>	(504) Hood
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)		(155) Head restraint system	(201) Front header	(505) Hood ornament
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)		(160) Other occupants (specify): _____	(202) Rear header	(506) Windshield, roof rail, A-pillar
(017) Windshield reinforced by exterior object (specify) _____		(161) Interior loose objects	(203) Roof left side rail	(507) Side surface
		(162) Child safety seat (specify): <b>SEAT BACK</b>	(204) Roof right side rail	(508) Side mirrors
		(163) Other interior object (specify): _____	(205) Roof or convertible top	(509) Other side protrusions (specify): _____
(019) Other front object (specify): _____				
		<b>AIR BAG</b>	<b>FLOOR</b>	(510) Rear surface
<b>LEFT SIDE</b>		(170) Air bag-driver side	(251) Floor (including toe pan)	(511) Undercarriage
(051) Left side interior surface, excluding hardware or armrests		(171) Air bag-driver side and eyewear	(252) Floor or console mounted transmission lever, including console	(512) Tires and wheels
(052) Left side hardware or armrest		(172) Air bag-driver side and jewelry	(253) Parking brake handle	(513) Other exterior of other motor vehicle (specify): _____
(053) Left A (A1/A2)-pillar		(173) Air bag-driver side and object held	(254) Foot controls including parking brake	
(054) Left B-pillar		(174) Air bag-driver side and object in mouth		(514) Unknown exterior of other motor vehicle
(055) Other left pillar (specify): _____		(175) Air bag compartment cover-driver side	<b>REAR</b>	
		(176) Air bag compartment cover-driver side and eyewear	(301) Backlight (rear window)	<b>OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT</b>
(056) Left side window glass		(177) Air bag compartment cover-driver side and jewelry	(302) Backlight storage rack, door, etc.	(551) Ground
(057) Left side window frame		(178) Air bag compartment cover-driver side and object held	(303) Other rear object (specify): _____	(598) Other vehicle or object (specify): _____
(058) Left side window sill		(179) Air bag compartment cover-driver side and object in mouth		(599) Unknown vehicle or object
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.		(180) Air bag-passenger side	<b>ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT</b>	
(060) Other left side object (specify): _____		(181) Air bag-passenger side and eyewear	(401) Hand controls for braking/acceleration	<b>NONCONTACT INJURY</b>
		(182) Air bag-passenger side and jewelry	(402) Steering control devices (attached to OEM steering wheel)	(601) Fire in vehicle
<b>RIGHT SIDE</b>			(403) Steering knob attached to steering wheel	(602) Flying glass
(101) Right side interior surface, excluding hardware or armrests			(405) Replacement steering wheel (i.e., reduced diameter)	(603) Other noncontact injury source (specify): _____
			(406) Joy stick steering controls	(604) Air bag exhaust gases
			(407) Wheelchair tie-downs	(697) Injured, unknown source
			(408) Modification to seat belts, (specify): _____	
			(409) Additional or relocated switches, (specify): _____	
			(410) Raised roof	

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

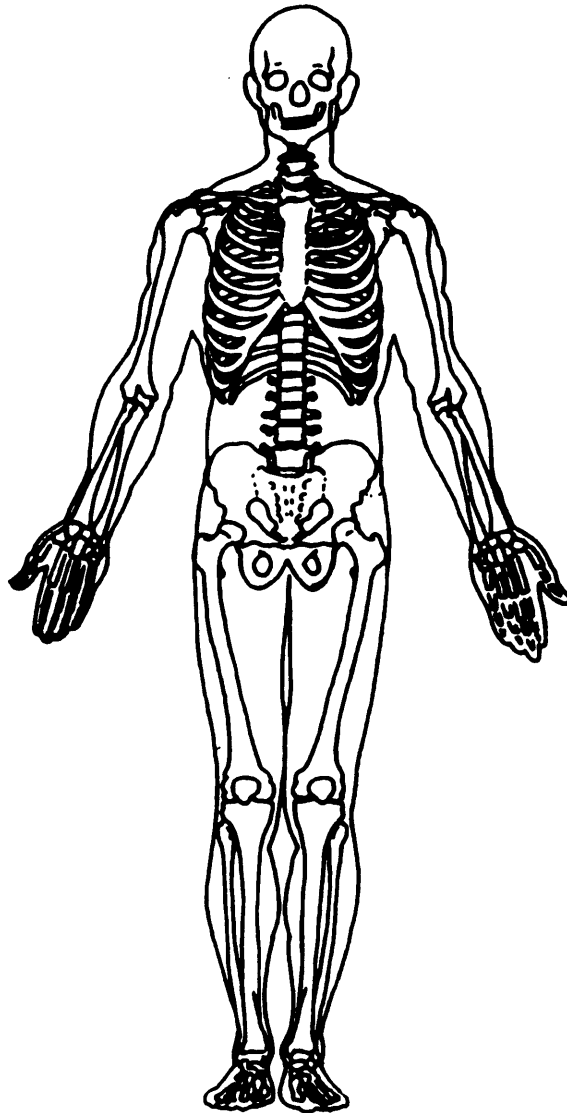
Arterial Blood Gases

pH = \_\_\_

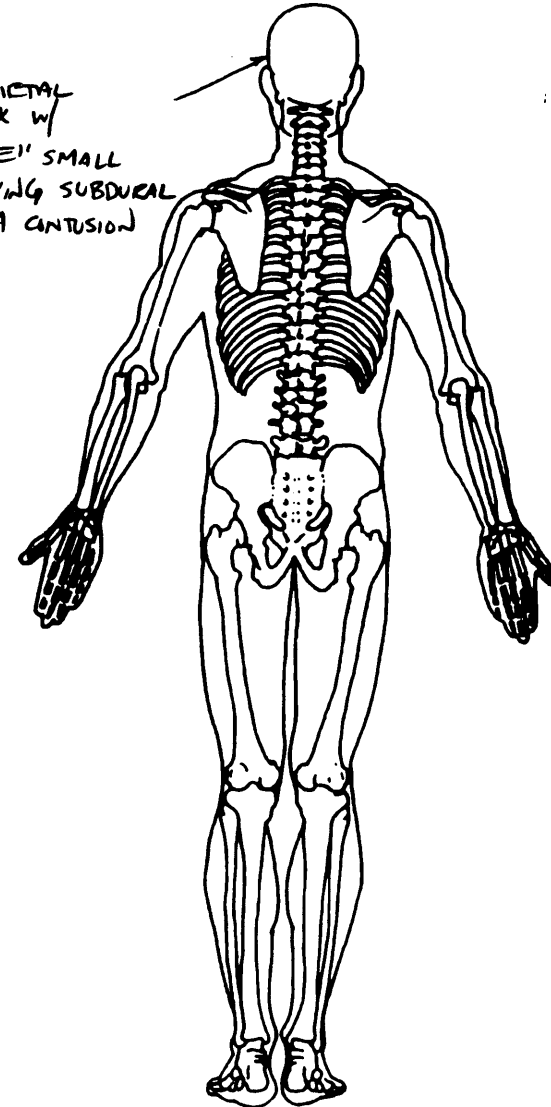
PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> = \_\_\_

HCO<sub>3</sub> = \_\_\_

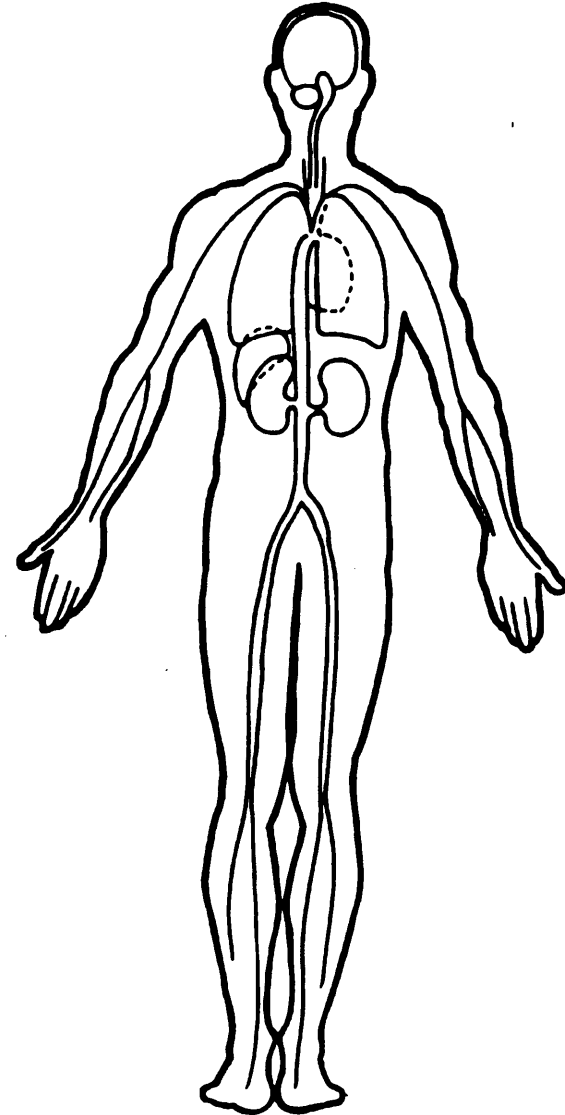
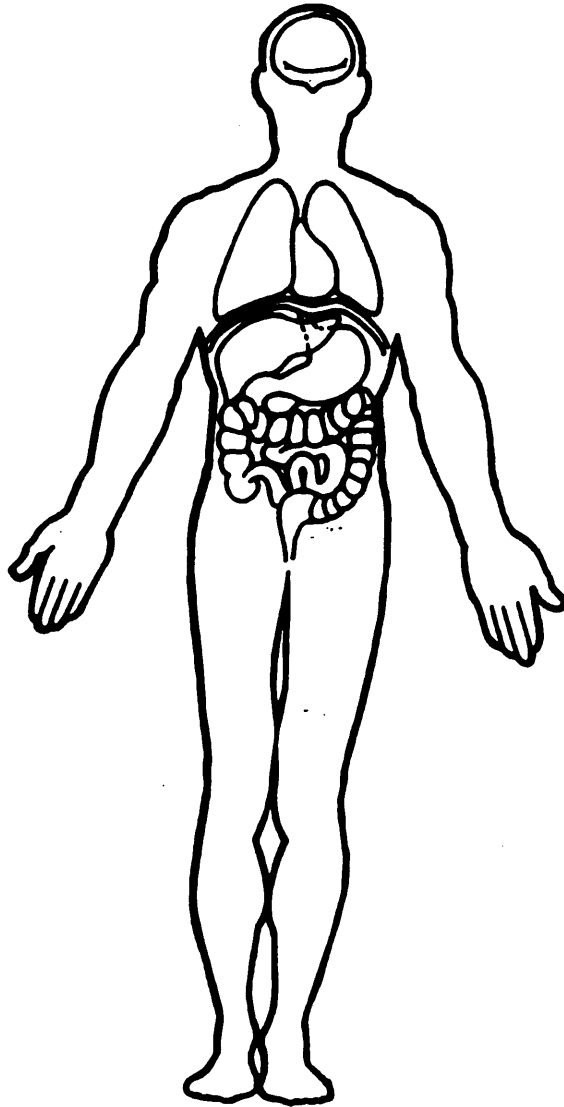


LEFT PARIETAL  
SKULL FX W/  
"POSSIBLE" SMALL  
UNDERLYING SUBDURAL  
HEMATOMA CONTUSION



## OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)







## GENERAL VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

## VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

7. Body Type

Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
J	T	8	V	V	2	2	T	8	M	O	X	X	X	X	X	X

Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines

9. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

## OFFICIAL RECORDS

10. Police Reported Vehicle Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

11. Police Reported Travel Speed

Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

\_\_\_\_ mph X 1.6093 = \_\_\_\_ kmph

12. Speed Limit

(000) No statutory limit  
Code posted or statutory speed limit  
in kmph  
(999) Unknown

40 mph X 1.6093 = 064 kmph

13. Police Reported Alcohol Presence For Driver

- (0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

14. Alcohol Test Result For Driver

Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: \_\_\_\_\_

15. Police Reported Other Drug Presence For  
Driver

- (0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown

16. Other Drug Specimen Test Result For Driver

- (0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify):  
(3) Specimen test given, results unknown or not  
obtained  
(8) No driver present  
(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin

- (1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify):  
(8) No driver present  
(9) Unknown

# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

**PRECRASH ENVIRONMENTAL DATA****19. Relation To Interchange Or Junction** 2

- (0) Non-interchange area and non-junction  
(1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
(3) Driveway, alley access related  
(4) Other junction (specify) \_\_\_\_\_

(5) \_\_\_\_\_  
Unknown type of junction

(9) Unknown

**20. Trafficway Flow** 1

- (0) Not physically divided (two way traffic)  
(1) Divided trafficway-median strip without positive barrier  
(2) Divided trafficway-median strip with positive barrier  
(3) One way traffic  
(9) Unknown

**21. Number Of Travel Lanes** 3

- (1) One  
(2) Two  
(3) Three  
(4) Four  
(5) Five  
(6) Six  
(7) Seven or more  
(9) Unknown

**22. Roadway Alignment** 1

- (1) Straight  
(2) Curve right  
(3) Curve left  
(9) Unknown

**23. Roadway Profile** 2

- (1) Level  
(2) Uphill grade (>2%)  
(3) Hill crest  
(4) Downhill grade (>2%)  
(5) Sag  
(9) Unknown

**24. Roadway Surface Type** 1

- (1) Concrete  
(2) Bituminous (asphalt)  
(3) Brick or block  
(4) Slag, gravel, or stone  
(5) Dirt  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

**25. Roadway Surface Condition** 1

- (1) Dry  
(2) Wet  
(3) Snow or slush  
(4) Ice  
(5) Sand, dirt, or oil  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

**26. Light Conditions** 1

- (1) Daylight  
(2) Dark  
(3) Dark, but lighted  
(4) Dawn  
(5) Dusk  
(9) Unknown

**27. Atmospheric Conditions** 6

- (0) No adverse atmospheric-related driving conditions  
(1) Rain  
(2) Sleet/hail  
(3) Snow  
(4) Fog  
(5) Rain and fog  
(6) Sleet and fog  
(7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
(9) Unknown

**28. Traffic Control Device** 1

- (0) No traffic control(s)  
(1) Traffic control signal (not RR crossing)

*Regulatory*

- (2) Stop sign  
(3) Yield sign  
(4) School zone sign  
(5) Other regulatory sign (specify): \_\_\_\_\_

- (6) Warning sign (not RR crossing)  
(7) Unknown sign  
(8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

**29. Traffic Control Device Functioning** 2

- (0) No traffic control device  
(1) Traffic control device not functioning (specify) \_\_\_\_\_  
(2) Traffic control device functioning properly  
(9) Unknown

**PRECRASH DRIVER RELATED DATA**

30. Driver's Distraction/Inattention To Driving cb 1  
 (Prior To Recognition Of Critical Event)  
 (00) No driver present  
 (01) Attentive or not distracted  
 (02) Looked but did not see  
*Distractions*  
 (03) By other occupant(s), (specify): \_\_\_\_\_  
 (04) By moving object in vehicle (specify): \_\_\_\_\_  
 (05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_  
 (06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_  
 (07) While adjusting climate controls  
 (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_  
 (09) While using other device/object in vehicle (specify): \_\_\_\_\_  
 (10) Sleepy or fell asleep  
 (11) Distracted by outside person, object, or event (specify): \_\_\_\_\_  
 (12) Eating or drinking  
 (13) Smoking related  
 (97) Distracted/inattentive, details unknown  
 (98) Other, distraction (specify): \_\_\_\_\_  
 (99) Unknown
31. Pre-Event Movement (Prior to Recognition of Critical Event) 1 2  
 (00) No driver present  
 (01) Going straight  
 (02) Decelerating in traffic lane  
 (03) Accelerating in traffic lane  
 (04) Starting in traffic lane  
 (05) Stopped in traffic lane  
 (06) Passing or overtaking another vehicle  
 (07) Disabled or parked in travel lane  
 (08) Leaving a parking position  
 (09) Entering a parking position  
 (10) Turning right  
 (11) Turning left  
 (12) Making a U-turn  
 (13) Backing up (other than for parking position)  
 (14) Negotiating a curve  
 (15) Changing lanes  
 (16) Merging  
 (17) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify): \_\_\_\_\_  
 (99) Unknown
32. Critical Precrash Event 53  
*This Vehicle Loss of Control Due To:*  
 (01) Blow out or flat tire  
 (02) Stalled engine  
 (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_  
 (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_  
 (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_  
 (06) Traveling too fast for conditions  
 (08) Other cause of control loss (specify): \_\_\_\_\_  
 (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane  
 (11) Over the lane line on right side of travel lane  
 (12) Off the edge of the road on the left side  
 (13) Off the edge of the road on the right side  
 (14) End departure  
 (15) Turning left at intersection  
 (16) Turning right at intersection  
 (17) Crossing over (passing through) intersection  
 (18) This vehicle decelerating  
 (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Other vehicle stopped  
 (51) Traveling in same direction with lower steady speed  
 (52) Traveling in same direction while decelerating  
 (53) Traveling in same direction with higher speed  
 (54) Traveling in opposite direction  
 (55) In crossover  
 (56) Backing  
 (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line  
 (61) From adjacent lane (same direction)—over right lane line  
 (62) From opposite direction—over left lane line  
 (63) From opposite direction—over right lane line  
 (64) From parking lane  
 (65) From crossing street, turning into same direction  
 (66) From crossing street, across path  
 (67) From crossing street, turning into opposite direction  
 (68) From crossing street, intended path not known  
 (70) From driveway, turning into same direction  
 (71) From driveway, across path  
 (72) From driveway, turning into opposite direction  
 (73) From driveway, intended path not known  
 (74) From entrance to limited access highway  
 (78) Encroachment by other vehicle—details unknown

*Pedestrian, Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway  
 (81) Pedestrian approaching roadway  
 (82) Pedestrian—unknown location  
 (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_  
 (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_  
 (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway  
 (88) Animal approaching roadway  
 (89) Animal—unknown location  
 (90) Object in roadway  
 (91) Object approaching roadway  
 (92) Object—unknown location  
 (98) Other critical precrash event (specify): \_\_\_\_\_  
 (99) Unknown

33. Attempted Avoidance Maneuver 01

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 76

(Note: Applicable codes on back of this page)

(00) No impact

Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**

## OCCUPANT RELATED

37. Driver Presence in Vehicle 1  
(0) Driver not present  
(1) Driver present  
(9) Unknown
38. Number of Occupants This Vehicle 0 1  
(00-96) Code actual number of occupants for this vehicle  
(97) 97 or more  
(99) Unknown
39. Number of Occupant Forms Submitted 0 1

## AIR BAG RELATED

40. Is this an AOPS Vehicle? 2  
(0) No (includes unknown)  
(1) Yes - researcher determined  
(2) VIN determined air bag system  
(3) VIN determined automatic (passive) belts  
(4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 1  
(0) Not equipped or not available  
(1) No air bags deployed  
*Single Air Bag Vehicle*  
(2) Driver air bag deployed  
(3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
(4) Driver side only deployed  
(5) Passenger side only deployed  
(6) Driver and passenger side deployed  
(7) Driver and passenger side unknown if deployed  
(8) Air bag(s) deployed, details unknown  
(9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
(0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

## VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1 4 4 0  
Code weight to nearest 10 kilograms.  
(045) Less than 450 kilograms  
(610) 6,100 kilograms or more  
(999) Unknown  
3 1 6 4 lbs X .4536 = 1 4 3 5 kgs

Source: \_\_\_\_\_

44. Vehicle Cargo Weight 9 9 9 0  
Code weight to nearest 10 kilograms.  
(000) Less than 5 kilograms  
(450) 4,500 kilograms or more  
(999) Unknown  
\_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs  
Source: \_\_\_\_\_

## ROLLOVER DATA

45. Rollover 0 0  
(00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
(01-16) Code the number of quarter turns  
(17) Rollover, 17 or more quarter turns (specify):  
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
(99) Rollover (overturn), details unknown
46. Rollover Initiation Type 0 0  
(00) No rollover  
(01) Trip-over  
(02) Flip-over  
(03) Turn-over  
(04) Climb-over  
(05) Fall-over  
(06) Bounce-over  
(07) Collision with another vehicle  
(08) Other rollover initiation type specify):  
(98) Rollover--end-over-end  
(99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
(0) No rollover  
(1) On roadway  
(2) On shoulder--paved  
(3) On shoulder--unpaved  
(4) On roadside or divided trafficway median  
(8) Rollover--end-over-end  
(9) Unknown
48. Rollover Initiation Object Contacted 0 0  
(Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
(0) No rollover  
(1) Wheels/tires  
(2) Side plane  
(3) End plane  
(4) Undercarriage  
(5) Other location on vehicle (specify):  
(6) Non-contact rollover forces (specify):  
(8) Rollover--end-over-end  
(9) Unknown
50. Direction of Initial Roll 0  
(0) No rollover  
(1) Roll right - primarily about the longitudinal axis  
(2) Roll left - primarily about the longitudinal axis  
(8) Rollover--end-over-end  
(9) Unknown roll direction



## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover  
(01-30) — Vehicle Number

### Noncollision

(31) Turn-over — fall-over  
(32) No rollover impact initiation (end-over-end)  
(34) Jackknife

### Collision With Fixed Object

(41) Tree ( $\leq 10$  cm in diameter)  
(42) Tree ( $> 10$  cm in diameter)  
(43) Shrubbery or bush  
(44) Embankment

(45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

(50) Pole or post ( $\leq 10$  cm in diameter)  
(51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)  
(52) Pole or post ( $> 30$  cm in diameter)  
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier  
(55) Impact attenuator  
(56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

(57) Fence  
(58) Wall  
(59) Building  
(60) Ditch or culvert  
(61) Ground  
(62) Fire hydrant  
(63) Curb  
(64) Bridge  
(68) Other fixed object (specify): \_\_\_\_\_

(69) Unknown fixed object \_\_\_\_\_

### Collision with Nonfixed Object

(70) Passenger car, light truck, van, or other vehicle not in-transport  
(71) Medium/heavy truck or bus not in-transport  
(76) Animal  
(77) Train  
(78) Trailer, disconnected in transport  
(79) Object fell from vehicle in-transport  
(88) Other nonfixed object (specify): \_\_\_\_\_

(89) Unknown nonfixed object \_\_\_\_\_

(98) Other event (specify): \_\_\_\_\_

(99) Unknown event or object \_\_\_\_\_

**VERRIDE/UNDERRIDE (THIS VEHICLE)**

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underide

*Override (see specific CDC)*

*[Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)]*

- (1) 1st CDC  
(2) 2nd CDC  
(3) Other not automated CDC (specify):  
\_\_\_\_\_

*Underride (see specific CDC)*

*[Between 2 CDS applicable vehicles (Bodytype, GV07=1-49)]*

- (4) 1st CDC  
(5) 2nd CDC  
(6) Other not automated CDC (specify):  
\_\_\_\_\_

- (7) Medium/heavy truck or bus override (of any configuration)  
(9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

Values: (000)-(359) Code actual value  
(997) Noncollision  
(998) Impact with object  
(999) Unknown

53. Heading Angle For This Vehicle 2 5 0
54. Heading Angle For Other Vehicle 2 7 0

**RECONSTRUCTION DATA**

55. Towed Trailing Unit 0
- (0) No towed unit  
(1) Yes—towed trailing unit  
(9) Unknown
56. Documentation of Trajectory Data for This Vehicle 0
- (0) No  
(1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole  
(1) Not damaged  
(2) Cracked/sheared  
(3) Tilted <45 degrees  
(4) Tilted ≥45 degrees  
(5) Uprooted tree  
(6) Separated pole from base  
(7) Pole replaced  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown

**ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V**

58. Basis for Total (Resultant) Delta V (highest) 0 1

(00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program  
-damage only routine  
(02) Reconstruction program  
-damage and trajectory routine  
(03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover  
(06) Other non-horizontal forces  
(07) Sideswipe type damage  
(08) Severe override  
(09) Yielding object  
(10) Overlapping damage  
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.  
\_\_\_\_\_

(98) Other, (specify):  
\_\_\_\_\_

## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V 0 0 87.9 Nearest kmph (highest)         Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

60. Longitudinal Component of Delta V ⊕ 0 0 5 Highest         Nearest kmph (highest)         Nearest kmph (secondary)(NOTE: \_\_000 means greater than  
-0.5 kmph and less than +0.5 kmph)

(±160) ±159.5 kmph and above

( \_999) Unknown

61. Lateral Component of Delta V ⊕ 0 0 6 Highest5.9 Nearest kmph (highest)         Nearest kmph (secondary)(NOTE: \_\_000 means greater than -0.5 kmph and  
less than +0.5 kmph)

(±160) ±159.5 kmph and above

( \_999) Unknown

62. Energy Absorption 0 0 6 2 0 06722.8  
         Nearest 100 joules (highest)         Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)

(9997) 999,650 joules or more

(9999) Unknown

63. Impact Speed 9 9 8 Highest         Nearest kmph (highest)         Nearest kmph (secondary)(NOTE: 000 means  
less than 0.5 kmph)

(160) 159.5 kmph and above

(998) Trajectory algorithm not run

(999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program  
Results (For Highest Delta V) 3

(0) No reconstruction

(1) Collision fits model — results appear  
reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear  
reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent  
Speed 9 9 9 Highest         Nearest kmph (highest)         Nearest kmph (secondary)(NOTE: 000 means  
less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? [ ] YES [ ] NO

IF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO

## ESTIMATED DELTA V

## VEHICLE INSPECTION

66. Estimated Highest Delta V (Researcher Determined)

(0) Reconstruction Delta V coded

*Estimated Delta V*

- (1) Less than 10 kmph
- (2)  $\geq 10$  kmph but  $< 25$  kmph
- (3)  $\geq 25$  kmph but  $< 40$  kmph
- (4)  $\geq 40$  kmph but  $< 55$  kmph
- (5)  $\geq 55$  kmph

*Other estimates of damage severity*

- (6) Minor
- (7) Moderate
- (8) Severe
- (9) Unknown

67. Type of Vehicle Inspection

- (0) No inspection
- (1) Vehicle fully repaired-no damage evident
- (2) Partial inspection (specify): \_\_\_\_\_
- (3) Complete inspection

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67=0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

National Highway Traffic Safety  
Administration

BEST AVAILABLE COPY

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

67 inches X 2.54 = 174 centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

175 pounds X .4536 = 79 kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front of  
seat

(8) Other abnormal posture (specify):

(9) Unknown

## POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 4

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

## Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
 [ ] Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [x] Other (specify):

PAR

[ ] Unknown if belt used

## AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function 1

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 7

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) φ

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) φ

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? 1

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown



## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 9

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 9

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 9

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
\_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 9 7

- (00) Not equipped/not available  
\_\_\_\_\_  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 7

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
\_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 9 9 7

- (-000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(-996) Deployment, unknown longitudinal Delta V  
(-997) Not deployed  
(-998) Unknown if deployed  
(-999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 7

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 7

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 9 7

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
\_\_\_\_\_  
(95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION *continued*

## HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 9 7  
(00) Not equipped/not available  
(01) Not damaged  
(02) Object worn by occupant, (specify):  
\_\_\_\_\_  
(03) Object carried by occupant, (specify):  
\_\_\_\_\_  
(04) Adaptive/assistive controls, (specify):  
\_\_\_\_\_  
(05) Fire in vehicle  
(06) Thermal burns  
(07) Rescue or emergency efforts  
(88) Other damage source (specify):  
\_\_\_\_\_  
(95) Damaged, unknown source  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown
45. Was The Air Bag Tethered? 7  
(0) Not equipped/not available  
(1) No  
(2) Yes (specify number of tether straps):  
\_\_\_\_\_  
(3) Deployed, unknown if tethered  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown
46. Did The Air Bag Have Vent Ports? 7  
(0) Not equipped/not available  
(1) No  
(2) Yes (specify number of vent ports):  
\_\_\_\_\_  
(3) Deployed, unknown if vent ports present  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown
47. Was the Air Bag in this Occupant's Position  
Contacted by Another Occupant? 7  
(0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
\_\_\_\_\_  
(3) Deployed, unknown if other occupant contact to  
air bag  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown
48. Was This Occupant Wearing Eye-wear? 7  
(0) Not equipped/not available  
(1) No  
(2) Eyeglasses/sunglasses  
(3) Contact lenses  
(4) Deployed, unknown if eyewear worn  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

49. Head Restraint Type/Damage by Occupant  
at This Occupant Position 9  
(0) No head restraints  
(1) Integral—no damage  
(2) Integral—damaged during accident  
(3) Adjustable—no damage  
(4) Adjustable—damaged during accident  
(5) Add-on—no damage  
(6) Add-on—damaged during accident  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown
50. Seat Type (this Occupant Position) Φ 1  
(00) Occupant not seated or no seat  
(01) Bucket  
(02) Bucket with folding back  
(03) Bench  
(04) Bench with separate back cushions  
(05) Bench with folding back(s)  
(06) Split bench with separate back cushions  
(07) Split bench with folding back(s)  
(08) Pedestal (i.e., column supported)  
(09) Box mounted seat (i.e., van type)  
(10) Other seat type (specify):  
\_\_\_\_\_  
(99) Unknown
51. Seat Orientation (this Occupant Position) 1  
(0) Occupant not seated or no seat  
(1) Forward facing seat  
(2) Rear facing seat  
(3) Side facing seat (inward)  
(4) Side facing seat (outward)  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown
52. Seat Track Adjusted Position Prior To Impact 9  
(0) Occupant not seated or no seat  
(1) Non-adjustable seat track
- Adjustable Seat Track*  
(2) Seat at forward most track position  
(3) Seat between forward most and middle track  
positions  
(4) Seat at middle track position  
(5) Seat between middle and rear most track  
positions  
(6) Seat at rear most track position  
(9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 9 9

- (00) Occupant not seated or no seat  
(01) Not adjustable

*Upright prior to impact*

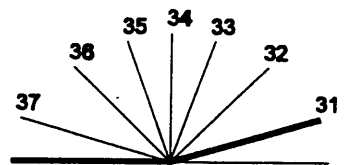
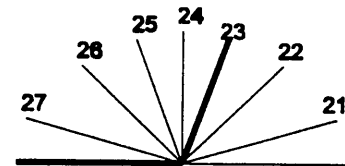
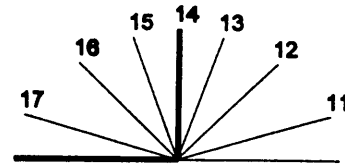
- (11) Moved to completely rearward position  
(12) Moved to rearward midrange position  
(13) Moved to slightly rearward position  
(14) Retained pre-impact position  
(15) Moved to slightly forward position  
(16) Moved to forward midrange position  
(17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
(22) Moved to rearward midrange position  
(23) Retained pre-impact position  
(24) Moved to upright position  
(25) Moved to slightly forward position  
(26) Moved to forward midrange position  
(27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
(32) Moved to rearward midrange position  
(33) Moved to slightly rearward position  
(34) Moved to upright position  
(35) Moved to slightly forward position  
(36) Moved to forward midrange position  
(37) Moved to completely forward position  
(99) Unknown

54. Seat Performance (this Occupant Position) 9

- (0) Occupant not seated or no seat  
(1) No seat performance failure(s)  
(2) Seat adjusters failed  
(3) Seat back folding locks or "seat back" failed  
(specify): \_\_\_\_\_  
(4) Seat track/anchors failed  
(5) Deformed by impact of occupant  
(6) Deformed by passenger compartment intrusion,  
(specify): \_\_\_\_\_  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model

φ φ φ

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat

φ

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation

φ φ

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage

φ φ

59. Child Safety Seat Shield Usage

φ φ

60. Child Safety Seat Tether Usage

φ φNote: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)**0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality**0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)**0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

**64. Hospital Stay**0 0

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost**9 9

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**

66. Time to Death   0     0    
       Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown
67. 1st Medically Reported Cause of Death   0     0
68. 2nd Medically Reported Cause of Death   0     0
69. 3rd Medically Reported Cause of Death   0     0    
       Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify): \_\_\_\_\_  
 (97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_  
 (99) Unknown
70. Number of Recorded Injuries for This Occupant   0     0    
       Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

**TRAUMA DATA**

71. Glasgow Coma Scale (GCS) Score   0     0    
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured
72. Was the Occupant Given Blood?   1    
 (1) No - blood not given  
 (2) Yes - blood given  
       (specify units): \_\_\_\_\_  
 (9) Unknown if blood given
73. Arterial Blood Gases (ABG) - HCO<sub>3</sub>   0     9    
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination   8    
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Vehicle inspection  
 (2) Official injury data  
 (3) Driver/occupant interview  
 (8) Other (specify): PAR  
 (9) Unknown if belt used





# CRASHPC PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Identifying Title	<u>AB-22</u>	<u>01</u>	Date (Month, day, year) of Run
Primary Sampling Unit	Case No.-Stratum	Accident Event Sequence No.	

## CRASHPC Vehicle Identification

Vehicle 1	<u>1995</u>	<u>FORD</u>	<u>ESCORT</u>
Vehicle 2	<u>1991</u>	<u>LEXUS</u>	<u>ES250</u>
	Year	Make	Model
			NASS Veh. No.

## GENERAL INFORMATION

VEHICLE 1				VEHICLE 2			
Size	<u>1</u>			Size	<u>3</u>		
Weight	<u>180</u>			Weight	<u>3218</u>		
<u>2296</u> + <u>420</u> + <u>2496</u> = <u>2496</u> kg				<u>3218</u> + <u>175</u> + <u>3393</u> = <u>3393</u> kg			
Curb Occupant(s) Cargo				Curb Occupant(s) Cargo			
CDC	<u>1 2 F Z E W 1</u>			CDC	<u>0 7 L B E W 2</u>		
PDOF (-180 to +180)	<u>0</u>			PDOF (-180 to +180)	<u>0 130</u>		
Stiffness	<u>9</u>			Stiffness	<u>3</u>		

## SCENE INFORMATION

Rest and Impact Positions [ ] No, Go To Damage Information [ ] Yes

### VEHICLE 1

Rest Position X            m  
Y            m  
PSI           

Impact Position X            m  
Y            m  
PSI           

Slip Angle(-180 to +180)           

### VEHICLE 2

Rest Position X            m  
Y            m  
PSI           

Impact Position X            m  
Y            m  
PSI           

Slip Angle (-180 to +180)           

## VEHICLE MOTION

Sustained Contact [ ] No [ ] Yes

### VEHICLE 1

Vehicle Rotation [ ] No [ ] Yes

Rotation Stop Before Rest [ ] No [ ] Yes

End of Rotation Position X            m  
Y            m  
PSI           

Curved Path [ ] No [ ] Yes

Point on Path X            m Y            m

Rotation Direction [ ] None [ ] CW [ ] CCW

Rotation >360° [ ] No [ ] Yes

### VEHICLE 2

Vehicle Rotation [ ] No [ ] Yes

Rotation Stop Before Rest [ ] No [ ] Yes

End of Rotation Position X            m  
Y            m  
PSI           

Curved Path [ ] No [ ] Yes

Point on Path X            m Y            m

Rotation Direction [ ] None [ ] CW [ ] CCW

Rotation >360° [ ] No [ ] Yes

## National Accident Sampling System-Crashworthiness Data System: CRASHPC Program Summary

## FRICTION INFORMATION

Coefficient of Friction \_\_\_\_\_  
 Rolling Resistance Option \_\_\_\_\_

## Vehicle 1 Rolling Resistance

LF \_\_\_\_\_ RF \_\_\_\_\_  
 LR \_\_\_\_\_ RR \_\_\_\_\_

## Vehicle 2 Rolling Resistance

LF \_\_\_\_\_ RF \_\_\_\_\_  
 LR \_\_\_\_\_ RR \_\_\_\_\_

## TRAJECTORY INFORMATION

Trajectory Data ☐ No ☐ Yes

If No, Go To Damage Information

## Vehicle 1 Steer Angles

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
 LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

## Vehicle 2 Steer Angles

LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
 LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Terrain Boundary ☐ No ☐ Yes

## First Point

X \_\_\_\_\_ m Y \_\_\_\_\_ m

## Second Point

X \_\_\_\_\_ m Y \_\_\_\_\_ m

Secondary Coefficient of Friction \_\_\_\_\_

## DAMAGE INFORMATION

## VEHICLE 1

(INCHES)

Damage Length L 58 cm

Crush Depths  
 C<sub>1</sub> 0 cm  
 C<sub>2</sub> 0 cm  
 C<sub>3</sub> 6 cm  
 C<sub>4</sub> 1 cm  
 C<sub>5</sub> \_\_\_\_\_ cm  
 C<sub>6</sub> \_\_\_\_\_ cm

Damage Offset D <sup>+</sup> +19 cm

## VEHICLE 2

Damage Length L 28 cm

Crush Depths  
 C<sub>1</sub> 2 cm  
 C<sub>2</sub> 3 cm  
 C<sub>3</sub> 4 cm  
 C<sub>4</sub> 5 cm  
 C<sub>5</sub> 3 cm  
 C<sub>6</sub> 0 cm

Damage Offset D <sup>+</sup> 0 494 cm

IF THIS COMMERCIAL VEHICLE WAS USED IN THE TRANSPORT, FILL IN THE INFORMATION BELOW

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

NO MESSAGES

IMPACT SPEED mph		SPEED CHANGE mph			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		6.7	-6.7	0.0	DAMAGE DATA ONLY

OSI-95-AB-22 Escort v. Lexus

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SUMMARY OF DAMAGE DATA  
(NOTE: '\*\*' indicates default value)

	Vehicle #1	Vehicle #2
CLASS / STIFFNESS CATEGORIES	1 / 9	3 / 3
WEIGHT	2496.0 lb	3393.0 lb
CDC	12FZEW1	07LBEW2
DAMAGE WIDTH	58.0 in	28.0 in
CRUSH DEPTH 1	0.0 in	2.0 in
CRUSH DEPTH 2	0.0 in	3.0 in
CRUSH DEPTH 3	6.0 in	4.0 in
CRUSH DEPTH 4	1.0 in	5.0 in
CRUSH DEPTH 5		3.0 in
CRUSH DEPTH 6		0.0 in
DAMAGE MIDPOINT OFFSET	19.0 in	-94.0 in
DAMAGE ENERGY	5447.2 ft-lb	4575.6 ft-lb
MAGNITUDE OF PRINCIPAL FORCE	24215.1 lb	13013.7 lb
DIRECTION OF PRINCIPAL FORCE	0.0 deg	-130.0 deg
MOMENT ARM OF PRINCIPAL FORCE	30.0 in	-50.3 in
DAMAGE CENTROID	30.0 in	-94.6 in

DIMENSIONAL, INERTIAL AND CRUSH STIFFNESS PROPERTIES  
(NOTE: '\*\*' indicates default value)

	Vehicle #1		Vehicle #2	
CG TO FRONT AXLE	45.1 in	**	51.3 in	**
CG TO REAR AXLE	48.1 in	**	55.5 in	**
TRACKWIDTH	51.1 in	**	58.9 in	**
YAW MOMENT OF INERTIA	12958.0 lb-sec <sup>2</sup> -in	**	29188.2 lb-sec <sup>2</sup> -in	**
MASS	6.5 lb-sec <sup>2</sup> /in		8.8 lb-sec <sup>2</sup> /in	
BODY LENGTH FROM CG TO FRONT	76.0 in	**	89.8 in	**
BODY LENGTH FROM CG TO REAR	-83.8 in	**	-106.4 in	**
BODY OVERALL WIDTH	60.8 in	**	72.6 in	**

CRUSH STIFFNESSES:	A	B	A	B
	lb/in	lb/in <sup>2</sup>	lb/in	lb/in <sup>2</sup>
ZONE 1	216.0	93.0	173.3 **	57.1 **
ZONE 2	216.0	93.0	173.3 **	57.1 **
ZONE 3	216.0	93.0	173.3 **	57.1 **
ZONE 4			173.3 **	57.1 **
ZONE 5			173.3 **	57.1 **

DSI-95-AB-22 Barrier Crash Run

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## SUMMARY OF DAMAGE DATA

(NOTE: '\*\*' indicates default value)

	Vehicle #1	Vehicle #2	
CLASS / STIFFNESS CATEGORIES	1 / 9	11 / 11	
WEIGHT	2496.0 lb	1000000.0 lb	**
CDC	12FZEW1	BARRIER	
DAMAGE WIDTH	58.0 in	0.0 in	**
CRUSH DEPTH 1	0.0 in	0.0 in	**
CRUSH DEPTH 2	0.0 in	0.0 in	**
CRUSH DEPTH 3	6.0 in	0.0 in	**
CRUSH DEPTH 4	1.0 in	0.0 in	**
DAMAGE MIDPOINT OFFSET	19.0 in	0.0 in	**
DAMAGE ENERGY	5447.2 ft-lb	0.0 ft-lb	
MAGNITUDE OF PRINCIPAL FORCE	24215.1 lb	24215.1 lb	
DIRECTION OF PRINCIPAL FORCE	0.0 deg	180.0 deg	**
MOMENT ARM OF PRINCIPAL FORCE	30.0 in	0.0 in	
DAMAGE CENTROID	30.0 in	0.0 in	

## DIMENSIONAL, INERTIAL AND CRUSH STIFFNESS PROPERTIES

(NOTE: '\*\*' indicates default value)

	Vehicle #1		Vehicle #2	
CG TO FRONT AXLE	45.1 in	**	50.0 in	**
CG TO REAR AXLE	48.1 in	**	50.0 in	**
TRACKWIDTH	51.1 in	**	50.0 in	**
YAW MOMENT OF INERTIA	12958.0 lb-sec^2-in	**	1000000.0 lb-sec^2-in	**
MASS	6.5 lb-sec^2/in		12958.0 lb-sec^2/in	**
BODY LENGTH FROM CG TO FRONT	76.0 in	**	50.0 in	**
BODY LENGTH FROM CG TO REAR	-83.8 in	**	-50.0 in	**
BODY OVERALL WIDTH	60.8 in	**	100.0 in	**

## CRUSH STIFFNESSES:

	A	B	A	B
	lb/in	lb/in^2	lb/in	lb/in^2
ZONE 1	216.0	93.0	1000000.0 **	1000000.0 **
ZONE 2	216.0	93.0		
ZONE 3	216.0	93.0		

S U M M A R Y      O F      E D C R A S H      R E S U L T S

Lic. User: NHTSA #7      S/N: 0266-7      Version: 4.61

Date: ████████-1996

DSI-95-AB-22    Escort v. Lexus

## MESSAGES:

NO MESSAGES

## VEHICLE # 1

IMPACT SPEED mph		SPEED CHANGE mph			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		6.6	-6.6	0.0	DAMAGE DATA ONLY

## VEHICLE # 2

IMPACT SPEED mph		SPEED CHANGE mph			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		4.9	3.1	3.7	DAMAGE DATA ONLY



IP

C

JTY

DOB [REDACTED] 1995

SEX M

Date of Exam [REDACTED] 95

RM # [REDACTED]

## CONSULTANT'S REPORT

Referring Physician:  
Consultant:

HISTORY

The patient is a 6-1/2 month old baby boy who sustained a head injury in a motor vehicle accident earlier today.

According to the mother, the car was struck earlier this morning with inflation of the air bag which broke off a piece of the car seat that the baby was in, striking him in the left side of the head. The mother states there was no loss of consciousness and the baby has been awake, though irritable since.

There is no previous history of significant head, neck or back problem or neurologic illness.

Past medical history, negative.

NO ALLERGIES. NO MEDICATIONS.

Family history positive for cancer. Social history: The patient lives at home with his mother and father.

PHYSICAL EXAMINATION

GENERAL/VITAL SIGNS: Afebrile, vital signs stable. The child is a well developed, well nourished little boy who is crying. HEENT: There is a contusion of the left parietal scalp, no Battle sign, no hemotympanum, no CSF, otorrhea or rhinorrhea or raccoon sign.

NECK, nontender to palpation, range of motion is good.

BACK, no visible or palpable deformity or tenderness.

LUNGS, clear to auscultation.

HEART, regular rhythm without murmur or gallop.

NEURO., mental status: [REDACTED] is awake and alert, attends to the examiner but is quite irritable. Cranial nerves II, Cruz fixates and tracks, there is good light reflex, III thru XII grossly intact. Motor exam, Cruz stands by himself with minimal support. He sits without assistance. He is moving all extremities vigorously, purposefully and equally. Tone is normal. Sensation intact to light touch. Reflexes 0 to trace, symmetric. Plantar responses downgoing. Imaging studies: Skull x-ray shows linear fracture in the left parietal region. C.T. scan of the head shows the fracture in the left parietal region. There is possibly a small subdural or small cortical contusion underlying it. No significant mass effect or shift. Subarachnoid space overlying the frontal lobes is generous.

CONSULTANT'S REPORT

Page 1

IP

DOB [REDACTED] 1995

SEX M

Date of Exam [REDACTED] 95

RM [REDACTED]

DIAGNOSTIC IMPRESSION

1. Left parietal skull fracture with possible small underlying subdural hematoma contusion.

RECOMMENDATIONS

The patient should be observed closely overnight and repeat C.T. scan obtained in the morning.

Thank you for asking me to consult this boy and I will follow him with you.

cc: dr

cc: [REDACTED]

## 110

JUVENILE

BEST AVAILABLE COPY

CONFIDENTIAL (B27 WQ)

POLICE DEPARTMENT  
TRAFFIC COLLISION REPORTThis document contains juvenile record information furnished in accordance with your official duties. Further release by you of this information may be considered a violation of the law.  
Juvenile Case Number

FATAL CONDITIONS		NO. INJ. 1	H & R FELONY <input type="checkbox"/>	CITY [REDACTED]	[REDACTED]														
		NO. KILLED 0	H & R MISD. <input type="checkbox"/>	COUNTY [REDACTED]	Irvine Police Department SIGNED [REDACTED]														
LOCATION	COLLISION OCCURRED ON										DAY	MO.	DAY	YR	TIME (2400)	CIT. NO.	OFFICER ID.		
	[REDACTED]										[REDACTED]	[REDACTED]	95	1051	[REDACTED]	[REDACTED]			
ARTY	AT INTERSECTION WITH										TOW AWAY <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					STATE HWY. REL. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
	OR: FEET/MILES OF [REDACTED]																		
ARTY 1	DRIVER'S LICENSE NUMBER										STATE	CLASS	SAFETY EQUIP	YR.	MAKE	MODEL	STYLE	COLOR	LIC/STATE
	[REDACTED]										[REDACTED]	C	G	91	LEXUS	ES30	4DR	GRY	[REDACTED]
ARTY 2	NAME (FIRST, MIDDLE, LAST)										OTHER INVOLVED VEHICLE								
	[REDACTED]										[REDACTED]								
ARTY 3	STREET ADDRESS										OWNERS NAME <input type="checkbox"/> SAME AS DRIVER								
	[REDACTED]										[REDACTED]								
ARTY 4	CITY										OWNERS ADDRESS <input type="checkbox"/> SAME AS DRIVER								
	[REDACTED]										[REDACTED]								
ARTY 5	SEX	HAIR	EYES	HEIGHT	WEIGHT	MO.	BIRTHDATE DAY	YR.	AGE	RACE	DISPOSITION OF VEHICLE ON ORDERS OF: <input type="checkbox"/> OFCR <input checked="" type="checkbox"/> DRIVER <input type="checkbox"/> OTHER								
	M	BLK	BRN	5-7	175	[REDACTED]	74	51	0		DRIVEN AWAY								
ARTY 6	RES. PHONE										ICC <input type="checkbox"/> PUC <input type="checkbox"/> CHP <input type="checkbox"/>								
	[REDACTED]										PRIOR MECHANICAL DEFECTS <input checked="" type="checkbox"/> NONE APPARENT <input type="checkbox"/> SEE NARRATIVE								
ARTY 7	INSURANCE CARRIER										VEHICLE DAMAGE <input type="checkbox"/> UNK <input type="checkbox"/> NONE <input checked="" type="checkbox"/> MINOR <input type="checkbox"/> MOD <input type="checkbox"/> MAJOR <input type="checkbox"/> TOTAL								
	[REDACTED]										[REDACTED]								
ARTY 8	SPEED	POSTED	DIR. OF TRAVEL	ON/ACROSS (STREET OR HIGHWAY)							[REDACTED]								
	10	NP	E10	[REDACTED]							[REDACTED]								
ARTY 9	DRIVER'S LICENSE NUMBER										STATE	CLASS	SAFETY EQUIP	YR.	MAKE	MODEL	STYLE	COLOR	LIC/STATE
	[REDACTED]										[REDACTED]	D	G11	95	FORD	ES30	2DR	BRN	[REDACTED]
ARTY 10	NAME (FIRST, MIDDLE, LAST)										OTHER INVOLVED VEHICLE								
	[REDACTED]										[REDACTED]								
ARTY 11	STREET ADDRESS										OWNERS NAME <input checked="" type="checkbox"/> SAME AS DRIVER								
	[REDACTED]										[REDACTED]								
ARTY 12	CITY										OWNERS ADDRESS <input type="checkbox"/> SAME AS DRIVER								
	[REDACTED]										[REDACTED]								
ARTY 13	SEX	HAIR	EYES	HEIGHT	WEIGHT	MO.	BIRTHDATE DAY	YR.	AGE	RACE	DISPOSITION OF VEHICLE ON ORDERS OF: <input type="checkbox"/> OFCR <input checked="" type="checkbox"/> DRIVER <input type="checkbox"/> OTHER								
	F	BLK	BRN	5-3	150	[REDACTED]	74	21	1		DR TOW								
ARTY 14	RES. PHONE										ICC <input type="checkbox"/> PUC <input type="checkbox"/> CHP <input type="checkbox"/>								
	[REDACTED]										PRIOR MECHANICAL DEFECTS <input checked="" type="checkbox"/> NONE APPARENT <input type="checkbox"/> SEE NARRATIVE								
ARTY 15	INSURANCE CARRIER										VEHICLE DAMAGE <input type="checkbox"/> UNK <input type="checkbox"/> NONE <input type="checkbox"/> MINOR <input checked="" type="checkbox"/> MOD <input type="checkbox"/> MAJOR <input type="checkbox"/> TOTAL								
	[REDACTED]										[REDACTED]								
ARTY 16	SPEED	POSTED	DIR. OF TRAVEL	ON/ACROSS (STREET OR HIGHWAY)							[REDACTED]								
	40	UP.	W10	[REDACTED]							[REDACTED]								
ARTY 17	DRIVER'S LICENSE NUMBER										STATE	CLASS	SAFETY EQUIP	YR.	MAKE	MODEL	STYLE	COLOR	LIC/STATE
	[REDACTED]										[REDACTED]								
ARTY 18	NAME (FIRST, MIDDLE, LAST)										OTHER INVOLVED VEHICLE								
	[REDACTED]										[REDACTED]								
ARTY 19	STREET ADDRESS										OWNERS NAME <input type="checkbox"/> SAME AS DRIVER								
	[REDACTED]										[REDACTED]								
ARTY 20	CITY										OWNERS ADDRESS <input type="checkbox"/> SAME AS DRIVER								
	[REDACTED]										[REDACTED]								
ARTY 21	SEX	HAIR	EYES	HEIGHT	WEIGHT	MO.	BIRTHDATE DAY	YR.	AGE	RACE	DISPOSITION OF VEHICLE ON ORDERS OF: <input type="checkbox"/> OFCR <input type="checkbox"/> DRIVER <input type="checkbox"/> OTHER								
ARTY 22	RES. PHONE										ICC <input type="checkbox"/> PUC <input type="checkbox"/> CHP <input type="checkbox"/>								
	[REDACTED]										PRIOR MECHANICAL DEFECTS <input type="checkbox"/> NONE APPARENT <input type="checkbox"/> SEE NARRATIVE								
ARTY 23	INSURANCE CARRIER										VEHICLE DAMAGE <input type="checkbox"/> UNK <input type="checkbox"/> NONE <input type="checkbox"/> MINOR <input type="checkbox"/> MOD <input type="checkbox"/> MAJOR <input type="checkbox"/> TOTAL								
	[REDACTED]										[REDACTED]								
ARTY 24	SPEED	POSTED	DIR. OF TRAVEL	ON/ACROSS (STREET OR HIGHWAY)							[REDACTED]								
ARTY 25	OWNER'S NAME										RES. PHONE								
	[REDACTED]										[REDACTED]								
ARTY 26	OWNER'S ADDRESS (STREET, CITY, STATE, ZIP)										BUSINESS PHONE								
	[REDACTED]										[REDACTED]								
ARTY 27	NOTIFIED																		
	<input type="checkbox"/> YES <input type="checkbox"/> NO																		
ARTY 28	DESCRIPTION OF PROPERTY										DESCRIPTION OF DAMAGE								
	[REDACTED]										[REDACTED]								

COLLISION NARRATIVE

INDICATE  
DIRECTION

ITEMS MARKED BELOW WHICH ARE FOLLOWED BY AN ASTERISK(\*) SHOULD BE EXPLAINED IN THE NARRATIVE

PRIMARY COLLISION FACTOR LIST NUMBER (1) OF PARTY AT FAULT		TRAFFIC CONTROL DEVICES		1	2	3	TYPE OF VEHICLE		1	2	3	MOVEMENT PROCEEDING COLLISION	
<input checked="" type="checkbox"/> A VC SECTION VIOLATED:	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/> A CONTROLS FUNCTIONING		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/> A PASSENGER CAR - STA. WGN.					<input checked="" type="checkbox"/> A STOPPED	
<input checked="" type="checkbox"/> B OTHER IMPROPER DRIVING*		<input type="checkbox"/> B CONTROLS NOT FUNCTIONING*					<input type="checkbox"/> B PASSENGER CAR W. TRAILER					<input checked="" type="checkbox"/> B PROCEEDING STRAIGHT	
		<input type="checkbox"/> C CONTROLS OBSCURED					<input type="checkbox"/> C MOTORCYCLE, SCOOTER					<input checked="" type="checkbox"/> C RAN OFF ROAD	
<input checked="" type="checkbox"/> C OTHER THAN DRIVER*		<input checked="" type="checkbox"/> D NO CONTROLS PRESENT / FACTOR*			<input checked="" type="checkbox"/>		<input type="checkbox"/> D PICKUP OR PANEL TRUCK					<input type="checkbox"/> D MAKING RIGHT TURN	
<input type="checkbox"/> D UNKNOWN*		TYPE OF COLLISION					<input type="checkbox"/> E PICKUP, PANEL TRK. W. TLR.					<input type="checkbox"/> E MAKING LEFT TURN	
<input checked="" type="checkbox"/> E FELL ASLEEP*		<input type="checkbox"/> A HEAD-ON					<input type="checkbox"/> F TRUCK OR TRUCK TRACTOR					<input type="checkbox"/> F MAKING U TURN	
WEATHER (MARK 1 TO 2 ITEMS)		<input type="checkbox"/> B SIDESWIPE					<input type="checkbox"/> G TRK./TRK. TRACTOR W. TLR.					<input type="checkbox"/> G BACKING	
<input checked="" type="checkbox"/> A CLEAR		<input type="checkbox"/> C REAR END					<input type="checkbox"/> H SCHOOL BUS					<input type="checkbox"/> H SLOWING / STOPPING	
<input type="checkbox"/> B CLOUDY		<input type="checkbox"/> D BROADSIDE					<input type="checkbox"/> I OTHER BUS					<input type="checkbox"/> I PASSING OTHER VEHICLE	
<input type="checkbox"/> C RAINING		<input type="checkbox"/> E HIT OBJECT					<input type="checkbox"/> J EMERGENCY VEHICLE					<input type="checkbox"/> J CHANGING LANES	
<input type="checkbox"/> D SNOWING		<input type="checkbox"/> F OVERTURNED					<input type="checkbox"/> K HWY. CONST. EQUIPMENT					<input type="checkbox"/> K PARKING MANUEVER	
<input type="checkbox"/> E FOG/VISIBILITY FT.		<input type="checkbox"/> G VEHICLE / PEDESTRIAN					<input type="checkbox"/> L BICYCLE					<input type="checkbox"/> L ENTERING TRAFFIC	
<input type="checkbox"/> F OTHER*		<input checked="" type="checkbox"/> H OTHER*					<input type="checkbox"/> M OTHER VEHICLE					<input type="checkbox"/> M OTHER UNSAFE TURNING	
<input type="checkbox"/> G WIND		<input checked="" type="checkbox"/> I MOTOR VEHICLE INVOLVED WITH					<input type="checkbox"/> N PEDESTRIAN					<input type="checkbox"/> N XING INTO OPPOSING LANE	
LIGHTING		<input checked="" type="checkbox"/> A NON-COLLISION					<input type="checkbox"/> O MOPED					<input type="checkbox"/> O PARKED	
<input checked="" type="checkbox"/> A DAYLIGHT		<input type="checkbox"/> B PEDESTRIAN					OTHER ASSOCIATED FACTOR (MARK 1 TO 2 ITEMS)					<input type="checkbox"/> P MERGING	
<input type="checkbox"/> B DUSK - DAWN		<input type="checkbox"/> C OTHER MOTOR VEHICLE					<input type="checkbox"/> A VC SECTION VIOLATION	<input type="checkbox"/> YES <input type="checkbox"/> NO				<input type="checkbox"/> Q TRAVELING WRONG WAY	
<input type="checkbox"/> C DARK - STREET LIGHTS		<input type="checkbox"/> D MOTOR VEH. ON OTHER ROADWAY					<input type="checkbox"/> B VC SECTION VIOLATION	<input type="checkbox"/> YES <input type="checkbox"/> NO				<input type="checkbox"/> R OTHER*	
<input type="checkbox"/> D DARK - NO STREET LIGHTS		<input type="checkbox"/> E PARKED MOTOR VEHICLE					<input type="checkbox"/> C VC SECTION VIOLATION	<input type="checkbox"/> YES <input type="checkbox"/> NO				SOBRIETY - DRUG PHYSICAL (MARK 1 TO 2 ITEMS)	
<input type="checkbox"/> E DARK - STREET LIGHTS NOT FUNCTIONING*		<input type="checkbox"/> F TRAIN					<input type="checkbox"/> D					<input checked="" type="checkbox"/> A HAD NOT BEEN DRINKING	
ROADWAY SURFACE		<input type="checkbox"/> G BICYCLE					<input type="checkbox"/> E VISION OBSCUREMENT					<input type="checkbox"/> B HBD - UNDER INFLUENCE	
<input checked="" type="checkbox"/> A DRY		<input type="checkbox"/> H ANIMAL					<input type="checkbox"/> F INATTENTION*					<input type="checkbox"/> C HBD - NOT UNDER INFLU *	
<input checked="" type="checkbox"/> B WET		<input type="checkbox"/> I FIXED OBJECT					<input type="checkbox"/> G STOP & GO TRAFFIC					<input type="checkbox"/> D HBD - IMPAIRMENT UNK *	
<input type="checkbox"/> C SNOWY - ICY		<input type="checkbox"/> J OTHER OBJECT					<input type="checkbox"/> H ENTERING LEAVING RAMP					<input type="checkbox"/> E UNDER DRUG INFLU *	
<input type="checkbox"/> D SLIPPERY (MUDDY, OILY, ETC.)							<input type="checkbox"/> I PREVIOUS COLLISION					<input type="checkbox"/> F IMPAIRMENT - PHYSICAL *	
ROADWAY CONDITIONS (MARK 1 TO 2 ITEMS)		PEDESTRIAN'S ACTION					<input type="checkbox"/> J UNFAMILIAR WITH ROAD					<input type="checkbox"/> G IMPAIRMENT NOT KNOWN	
<input type="checkbox"/> A HOLES, DEEP RUTS*		<input checked="" type="checkbox"/> A NO PEDESTRIAN INVOLVED					<input type="checkbox"/> K DEFECTIVE VEH. EQUIP.	<input type="checkbox"/> YES <input type="checkbox"/> NO				<input type="checkbox"/> H NOT APPLICABLE	
<input type="checkbox"/> B LOOSE MATERIAL ON ROWY *		<input type="checkbox"/> B CROSSING IN CROSSWALK AT INTERSECTION					<input type="checkbox"/> L UNINVOLVED VEHICLE					<input type="checkbox"/> I SLEEPY / FATIGUED	
<input type="checkbox"/> C OBSTRUCTION ON ROADWAY*		<input type="checkbox"/> C CROSSING IN CROSSWALK - NOT AT INTERSECTION					<input type="checkbox"/> M OTHER					SPECIAL INFORMATION	
<input type="checkbox"/> D CONSTRUCTION ON ROADWAY*		<input type="checkbox"/> D CROSSING NOT IN CROSSWALK					<input type="checkbox"/> N NONE APPARENT					<input type="checkbox"/> A HAZARDOUS MATERIAL	
<input type="checkbox"/> E REDUCED ROADWAY WIDTH		<input type="checkbox"/> E IN ROAD INCLUDES SHOULDER					<input type="checkbox"/> O RUNAWAY VEHICLE						
<input type="checkbox"/> F FLOODED*		<input type="checkbox"/> F NOT IN ROAD											
<input type="checkbox"/> G OTHER*		<input type="checkbox"/> G APPROACH LEAVING SCHOOL BUS											
<input checked="" type="checkbox"/> H NO UNUSUAL CONDITIONS													

INVESTIGATED BY

ID NUMBER

INVESTIGATED BY

ID NUMBER

APPROVED BY

## JRED / WITNESSES / PASSENGERS

BEST AVAILABLE COPY

PAGE

COLLISION 95	TIME 24001 1051	NCIC NUMBER	OFFICER ID	NUMBER
<b>SEATING POSITION</b> 1 - DRIVER 2 TO 8 - PASSENGERS 7 - STA. WGN. REAR 8 - RR. OCC. TRK. OR VAN 9 - POSITION UNKNOWN 0 - OTHER		<b>SAFETY EQUIPMENT</b> <b>OCCUPANTS</b> A - NONE IN VEHICLE B - UNKNOWN C - LAP BELT USED D - LAP BELT NOT USED E - SHOULDER HARNESS USED F - SHOULDER HARNESS NOT USED G - LAP - SHOULDER HARNESS USED H - LAP - SHOULDER HARNESS NOT USED J - PASSIVE RESTRAINT USED K - PASSIVE RESTRAINT NOT USED <b>CHILD RESTRAINT</b> Q - IN VEHICLE USED R - IN VEHICLE NOT USED S - IN VEHICLE USE UNKNOWN T - IN VEHICLE IMPROPER USE U - NONE IN VEHICLE <b>M/C BICYCLE - HELMET</b> DRIVER V - NO W - YES PASSENGER X - NO Y - YES		<b>EJECTED FROM VEH.</b> 0 - NOT EJECTED 1 - FULLY EJECTED 2 - PARTIALLY EJECTED 3 - UNKNOWN

NAME	PASSenger ONLY	AGE	SEX	EXTENT OF INJURY ("X" ONE)				INJURED WAS ("X" ONE)					PARTY NUMBER	SEAT POS.	SAFETY EQUIP.	EJECTED
				FATAL INJURY	SEVERE INJURY	OTHER VISIBLE INJURY	COMPLAINT OF PAIN	DRIVER	PASS.	PED.	BICYCLIST	OTHER				
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BIRTHDATE								RES. PHONE				BUS. PHONE			
ADDRESS (STREET, CITY, STATE, ZIP)								INJURED TAKEN TO:							

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ADDRESS (STREET, CITY, STATE, ZIP)								INJURED TAKEN TO:							

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ADDRESS (STREET, CITY, STATE, ZIP)								INJURED TAKEN TO:							

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ADDRESS (STREET, CITY, STATE, ZIP)								INJURED TAKEN TO:							

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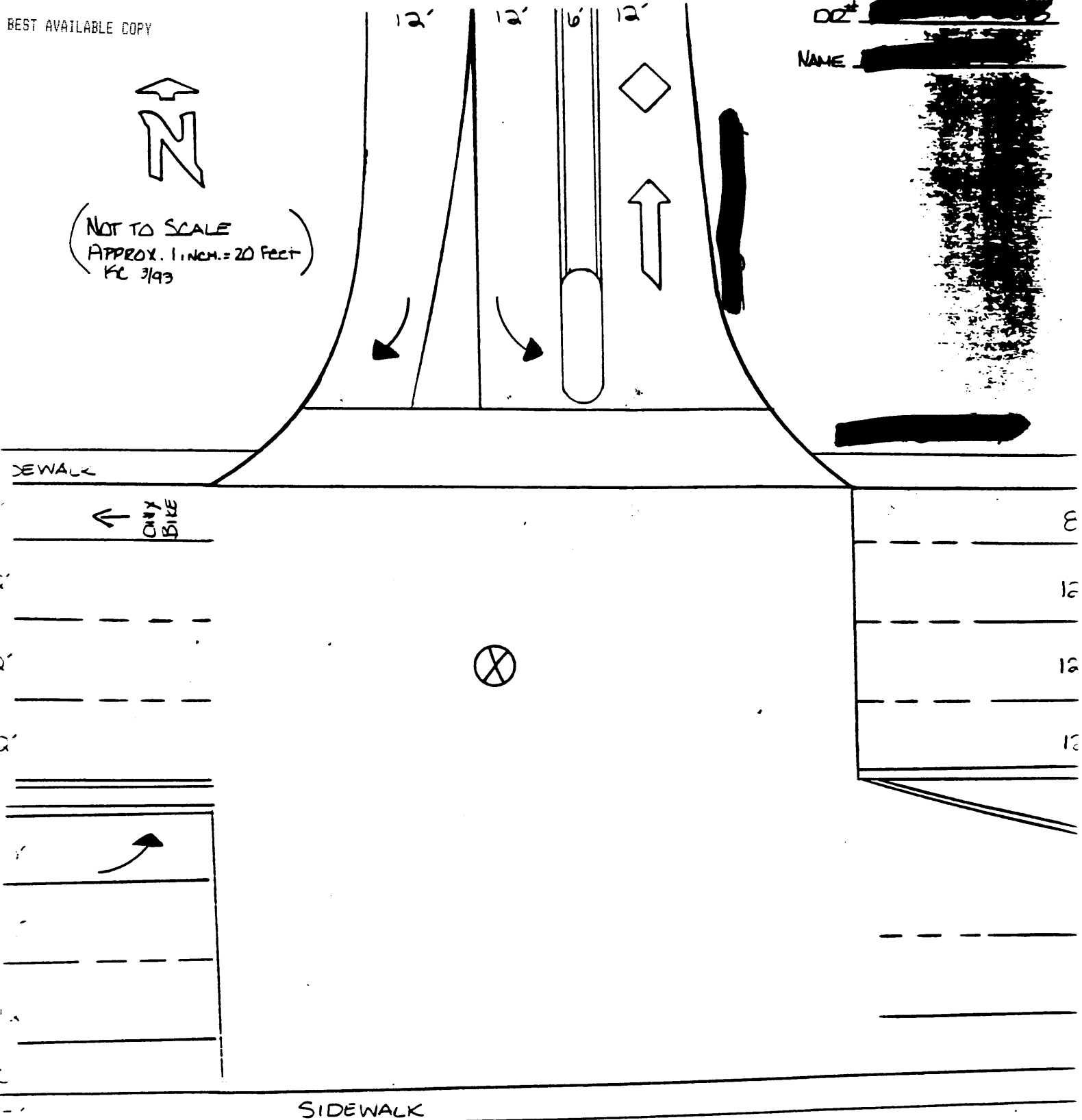
BIRTHDATE								RES. PHONE				BUS. PHONE			
ADDRESS (STREET, CITY, STATE, ZIP)								INJURED TAKEN TO:							

02# [REDACTED]

NAME [REDACTED]



(NOT TO SCALE  
APPROX. 1 INCH. = 20 FEET  
KC 3/93)



NO P.O.R.'S.

POZ

36' S/N/C/L [REDACTED]  
30' E/W/C/L [REDACTED]



Both roads are constructed of [REDACTED] cement concrete. Both roads are in good repair with no visible defects.

**Reporting Officer**

Supervisor Approving

Copy to Traffic

**TRAFFIC COLLISION**

Page 1

**INJURIES:**

Passenger No. 1 [REDACTED] sustained a bump contusion to the top of his head. He was treated at the scene by [REDACTED] Fire Authority Personnel from paramedic [REDACTED] and [REDACTED]. He was transported to [REDACTED] Center via [REDACTED] Ambulance where [REDACTED] was in attendance. [REDACTED] was found to have a skull fracture and was later transported to [REDACTED] Hospital of [REDACTED].

**PASSENGERS:**

See page 2.

**STATEMENTS:**

Driver No. 1 [REDACTED] stated that he was eastbound on [REDACTED] and turned into the left turn lane leading to the northbound [REDACTED] car pool lane. Once inside the lane he discovered that he had entered this lane that was going into the car pool lane which he did not want to do since he was a solo driver. He entered the intersection on a green light and instead of making a left turn he made a U-turn. While making his turn he was struck by vehicle No. 2 which was proceeding westbound on [REDACTED].

Driver No. 2 [REDACTED] states she was westbound in the No. 2 lane of [REDACTED] at approximately 50-55 miles per hour. As she approached the intersection at the [REDACTED] on-ramp/off-ramp at [REDACTED] she saw that she had a green light to go westbound. The light had been green for several seconds prior to reaching the intersection so she continued through the intersection. As she got to the intersection she saw V1 begin to make a left turn. She realized that V2 would be out of the intersection if he continued with his left turn so she continued with caution. At that time she noticed that V1 was not making a left turn but either making a U-turn or doing a 360 circle in the middle of the intersection. At that time she attempted braking to avoid it but struck the left rear of vehicle No. 1. At the time she struck vehicle No. 1 vehicle No. 1 was actually facing southbound across the westbound lanes of traffic.

Witness [REDACTED] stated he was traveling westbound in the No. 2 lane of [REDACTED] approaching the intersection at the [REDACTED] freeway with the green light. He noticed that V1 traveling eastbound was making a left turn onto the northbound [REDACTED] car pool ramp against a red light. Instead of completing the left turn V1 made a U-turn to move back onto [REDACTED]. At that time V2 had begun to brake hard and clipped the left back corner of vehicle No. 1. Witness [REDACTED] stated he was traveling westbound behind vehicle No. 2 and had

**TRAFFIC COLLISION**

Page 2

braked hard and veered to the right to avoid both vehicles and being involved in the collision.

**FACTS - ARRIVAL:**

At approximately 1051 hours Officer [REDACTED] was dispatched to the location, code 3, emergency lights and siren, and arrived at approximately 1056 hours. I later arrived at 1058 hours to handle the investigation. Upon my arrival and Officer [REDACTED] arrival both vehicles were at their points of rest and both parties were outside their vehicles. [REDACTED] Fire Authority Personnel from [REDACTED] and [REDACTED] had just arrived on the scene.

**TYPE OF COLLISION:**

This was a vehicle vs. vehicle, broadside collision. Vehicle No. 1 is a 1991 Lexus ES50 four door and vehicle No. 2 is a 1995 Ford Escort two door. The initial impact was between the left rear fender of vehicle No. 1 and the front bumper of vehicle No. 2.

Vehicle No. 1 sustained minor damage to its left front fender, left rear bumper and left rear taillight. Vehicle No. 2 sustained moderate damage to the right front bumper, grill, and hood. Both the air bags on vehicle No. 2 had deployed at the driver side and the right front passenger.

**ROADWAY:**

Refer to the back of the predrawn for a roadway description.

**POINT OF IMPACT:**

The point of impact was located within the intersection at the intersecting points of the westbound No. 2 lane of [REDACTED] and a turning radius of the left hand turn lane from eastbound [REDACTED] onto the northbound [REDACTED] car pool lane.

**SKIDS:**

Vehicle 2 right front 18 feet locked wheel. Vehicle 1, none.

TRAFFIC COLLISION  
Page 3

VEHICLE INSPECTION:

I located no vehicle defects on either vehicle that could have contributed to this collision.

EVIDENCE:

None taken at the scene that required logging into property.

MISCELLANEOUS:

OPINIONS:

Driver No. 1 [REDACTED] had been driving eastbound on [REDACTED] and realized he was turning onto a car pool lane on-ramp and did not want to violate [REDACTED] Vehicle Code because he was a solo driver. [REDACTED] then made a U-turn at that intersection in violation of a sign prohibiting U-turns in violation of section [REDACTED] failure to obey sign at intersection. Based on statements of driver No. 2, and the independent witness, [REDACTED] had also entered the intersection to make his turning movement against a red light in violation of section [REDACTED] failure to stop and remain stopped for a red arrow. These opinions are based upon statements of the involved parties, witness, vehicle damage, debris, and skids.

Based on the results of my investigation, I issued [REDACTED] a citation for violation of section [REDACTED] failure to stop and remain stopped for a red light and [REDACTED] failure to obey a sign at an intersection. He was issued citation [REDACTED] under authority of section [REDACTED]

rm

Approved: [REDACTED]

Date: [REDACTED]

POLICE DEPARTMENT

☐ SUPPLEMENTAL ☒ CITIZEN STATEMENT  
☐ ADDITIONAL OR ADJUSTED LOSS INVOLVED

## SUPPLEMENTAL

 (X 4) REP = REPORTING PARTY VIC = VICTIM WIT = WITNESS  
 INVOLVEMENT CODE: PAR = PARENT OTH = OTHER

DR NUMBER

PAGE

3. CLASSIFICATION

☐ VEHICLE ☐ RESIDENTIAL ☐ PERSON  
☐ COMMERCIAL ☐ NARCOTIC ☐ JUV

 5. NAME (LAST) (FIRST) (MIDDLE) 6. SEX ☐ M ☐ F 7. DOB 8. AGE

ADDRESS (APT #) 10. CITY 11. STATE 12. ZIP 13. HOME PHONE ( )

4. OCCUPATION 15. BUS. ADD (SCHOOL, IF JUV) 16. CITY 17. STATE 18. BUS. PHONE ( )

NAME OF PERSON MAKING STATEMENT (LAST) (FIRST) (MIDDLE) 20. DATE OF BIRTH 20A. AGE

HOME ADDRESS (APT #) 22. CITY 23. STATE 23A. ZIP 24. HOME PHONE

5. BUSINESS ADDRESS 26. CITY 27. STATE 28. BUSINESS PHONE

DATE/TIME STATEMENT WRITTEN 30. LOCATION STATEMENT WRITTEN

1. ITEM NO.	QUANTITY	SERIAL NO.	BRAND	MODEL NO.	MISC. DESCRIPTION (E.G. color, size, inscriptions, caliber, revolver, etc.)	PROPERTY VALUE	PROP TYPE
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Ford Escort was travelling westbound in outside lane <sup>2nd</sup> on  Hwy with a green light. Lexus travelling eastbound making left turn onto Northbound  Carpool ramp against red-light. Instead of completing left turn Lexus made a U-turn move back onto , presumably heading eastbound again. Ford Escort braked hard & clipped left back corner of Lexus. I was travelling westbound in inside line slightly behind Escort. I braked hard & veered to the right to swing around both vehicles & avoided being involved in the collision.

	1. Currency	2. Jewelry Prec. Metals	3. Clothing/Furs	5. Office Equip.	6. TV, Radio Cameras	7. Firearms	8. Household Goods	9. Consumable Gds.	10. Livestock	11. Misc.
\$ VALUE										
\$ RECOVERED										
\$ UNFOUNDED										

46. REPORTING OFFICER 47. ID NUMBER 48. APPROVED 49. DATE